

---

UNDERDEVELOPED EUROPE :  
REGIONAL PROBLEMS AND  
POLICIES IN THE CONTEXT  
OF EUROPEAN INTEGRATION .

---

GH. BULL

A comparative study with ref-  
erence to France, Italy and  
the Republic of Ireland.

Text submitted for the degree  
of Doctorate in Economics at  
the European University Inst-  
itute, Florence.

by

Gregory H. Bull, B.A.(Hons.), M.A.

1st July 1982.

THESES

338  
94

BUL

European University Library



3 0001 0011 8112 4

33894





---

UNDERDEVELOPED EUROPE :  
REGIONAL PROBLEMS AND  
POLICIES IN THE CONTEXT  
OF EUROPEAN INTEGRATION .

---

THESES

338  
94

BUL

A comparative study with ref-  
erence to France, Italy and  
the Republic of Ireland.



*ms*  
3

Text submitted for the degree  
of Doctorate in Economics at  
the European University Inst-  
itute, Florence.

by

Gregory H. Bull, B.A.(Hons.), M.A.

1st July 1982.



### Acknowledgements

First and foremost, special thanks go out to the late Sir Andrew Shonfield (E.U.I.), Prof. Manfred E. Streit (E.U.I.) and Malcolm C. Sawyer (University of York), for their advice, criticisms and opinions on various complementary parts of this work.

I also wish to thank Prof. Mariano D'Antonio (University of Naples), Dr. F.V. Meyer (University of Exeter), Prof. J. Pelkmans (E.U.I.) and Mssrs. Rainelli and Jegouzo (I.N.R.A. - Rennes) for having patiently read parts of this thesis, and for making known to me their views; Maria Wieken, for her assistance in ironing out problems with the new computer, and the library staff of the E.U.I. without whose help this research would quite simply not have been possible. Lastly, I wish to thank the Directorate General for Research and Documentation of the European Parliament, for granting me a R. Schuman Scholarship which provided valuable insight into the working of the E.C. institutions and policies, as well as time and facilities to finish this thesis.

The usual disclaimers apply in the fullest sense, and none of the abovementioned persons or institutions should in any way be associated with the views expressed in the pages which follow.

\* \* \* \* \*



C O N T E N T S

PART ONE

A REVIEW OF THE REGIONAL PROBLEM IN THE EUROPEAN COMMUNITIES

	1.1. <u>General Introduction</u>	p.1
<u>Chapter</u>	1.2. <u>Regional problems: income disparities, unemployment, migration and structural weaknesses</u>	p.4
	1.3. <u>The spatial pattern of economic development</u>	p.26
	Annexes,	p.33
<u>Chapter</u>	2. <u>Poverty at the periphery - regional inequality and the geography of welfare</u>	p.36
	2.1. <u>Introduction to studies on the extent of poverty and low-incomes.</u>	p.38
	2.2. Italy	p.51
	2.3. Ireland	p.80
	2.4. France	p.107
	2.5. Conclusions	p.145
	Annex,	p.148

PART TWO

REGIONAL DEVELOPMENT THEORY

<u>Chapter</u>	3. <u>The process of regional development</u>	
	3.1. <u>Spatial factors; dynamic considerations on the regional growth process</u>	p.151
	3.2. <u>A formal model of regional growth</u>	p.161
	- regional growth and regional income	p.170
	3.3. <u>The rationale for regional policy</u>	p.175
	Annexes,	p.182

<u>Chapter 4.</u>	<u>European centre-periphery relations in the context of European integration</u>	p.186
4.1.	<u>Location theory and economic polarisation</u>	p.186
4.2.	<u>The changing nature of the European Community's regional problem</u>	p.190

### PART THREE

#### REGIONAL STRUCTURE AND PERFORMANCE

<u>Chapter 5.</u>	<u>Unequal structures</u>	p.200
5.1.	Firm size structure, ownership and the implications for the regional economy	p.200
5.2.	A case study of differences in sectoral structure as between regions	p.210
5.3.	Regional employment structure - qualitative aspects of regional employment	p.220
5.4.	The regional implications of the spatial and sectoral distribution of research and development activities	p.234
5.5.	The business service sector as a bottleneck to innovative capacity	p.242
<u>Chapter 6.</u>	<u>Unequal competition - the spatial distribution effects of strategic firm behaviour</u>	p.247
6.1.	The effects of merger/takeover activity at the regional level	p.247
6.2.	The underlying causes of acquisition activity	p.253
6.3.	Barriers to entry and market pre-emption	p.254
6.4.	The development of overall concentration and acquisition activity and the growth of the large corporation	p.263
6.5.	<u>Corporate size and competition</u>	p.267
5.1.	vertical integration and defensive concentration	p.267
5.2.	monopolistic leverage	p.269
5.3.	spatial price competition	p.271

<u>Chapter 7.</u>	<u>The role of the large corporation in regional development - the growth of the multinational enterprise (M.N.E.)</u>	
7.1.	<u>Structure, conduct and performance</u>	p. 275
7.2.	<u>MNE location and its relation to regional development</u>	p. 282
2.1.	the level of MNE penetration	p. 286
2.2.	MNE location and regional incentives	p. 287
7.3.	<u>European integration and industrial development - theory and practice</u>	p. 294
Part III,	conclusions	p. 301

PART FOUR

REGIONAL DEVELOPMENT POLICY

<u>Chapter 8.</u>	<u>A survey and analysis of regional policy instruments in France, Italy and Ireland - with reference to the U.K.</u>	
8.1.	<u>Strategies for regional harmonisation</u>	p. 310
8.2.	<u>European Community principles for co-ordination of regional aid schemes</u>	p. 316
8.3.	<u>The major incentives and public policy - a review</u>	p. 318
3.1.	France	p. 318
3.2.	Italy	p. 336
3.3.	The Republic of Ireland	p. 356
3.4.	Deglomeration policies	p. 365
8.4.	<u>A comparison of the value of incentives and total expenditure on regional policy</u>	p. 371
8.5.	<u>Summary : some preliminary considerations on the effectiveness of the various instruments</u>	p. 377
Conclusions,		p. 394

<u>Chapter 9.</u>	<u>A quantitative analysis of the employment impact of regional policies in France and Italy - with reference to the U.K.</u>	
9.1.	<u>An introduction to the analysis</u>	p.398
9.1.2.	France	p.401
9.2.	Italy	p.443
9.3.	The role of the state and state controlled enterprise in regional development	p.452
9.4.	Summary and conclusions - a comparison of the cost of regional policy in France, Italy and the U.K.	p.455
Annexes,	p.460	-

PART FIVE

<u>Chapter 10.</u>	<u>EUROPEAN INTEGRATION AND REGIONAL DEVELOPMENT</u>	
10.1.	<u>European monetary integration and the regions - the issues involved</u>	p.467
10.2.	<u>European monetary integration and the European Monetary System (E.M.S.)</u>	p.494
10.3.1.	<u>Strategies for regional harmonisation; the alternatives reconsidered - alternative transfer systems</u>	p.500
10.3.2.	<u>The role of budgetary transfers and public finance in European integration</u>	p.503
10.4.	<u>The role of the European Community Funds</u>	p.510
	<u>CONCLUSIONS</u>	p.543



A REVIEW OF THE REGIONAL PROBLEM IN THE EUROPEAN COMMUNITY

1.1. GENERAL INTRODUCTION

Introduction: One aspect of the analysis of regional problems is that it is easier to describe the symptoms than to point to the causes.

We begin this chapter by highlighting a few of the most evident "symptoms" of the regional problem. Some of the possible causes are then discussed. Thirdly we look into the overall pattern of regional development at the European Community level. This is discussed, (i) at a theoretical level with reference to location theories and theories of spatial competition; (ii) at an empirical level with respect to regional employment and industrial structures, and (iii) at a dynamic level, taking into consideration factors which may explain the process of economic growth at a regional level.

Fourthly, we consider the implications of greater inter-EC trade links and direct foreign investment on the pattern of regional development. This leads on to a discussion of the regional implications of the multinational enterprise -- the locational aspects, the distribution of their economic surplus, and their linkages with firms in the domestic sector.

Fifthly, some alternative strategies for regional harmonisation are outlined. Policies to reduce regional disparities can be divided into two groups; firstly macro-policies working at either a national or Community level, such as public spending or fiscal integration; secondly micro-policies such as financial incentives and disincentive policies.

Perhaps it is first of all worthwhile to distinguish

between regional problems at the level of member states between themselves and regional problems at the level of individual regions within member states.

A fuller discussion of these important differences is mainly reserved for chapter 10. However, two in particular should now be mentioned. Firstly, factor mobility is likely to be greater within countries than between them. Secondly, individual countries may directly control their monetary, budgetary and exchange rate policies whereas the same is not true of regions within countries.

As a result, if exchange rates are flexible trade between countries will take place under conditions of comparative cost (McCrone 1968, Robson 1980).<sup>1</sup> Exchange rate adjustments may partially offset inter-country differences in factor costs giving some control over the national level of employment.

Between regions however, intra-country trade takes place under conditions of absolute advantage, and there is little possibility of adjusting factor earnings to match differences in regional productivity. Since factors are more mobile between regions than between countries, adjustment may take place mainly through capital and labour mobility, resulting in lower levels of output in some regions.

However, if, in a dynamic context, increases in labour productivity in the fast growing regions are not fully matched by increases in wage costs (Kaldor 1971), it is likely that the resulting fall in unit labour costs would attract both labour and capital to the high growth regions. As a result it is possible that economic activity would become more concentrated, income disparities would widen and labour and capital flows would persist from the less developed regions.

The above argument may of course be applied to groups of countries which join together in economic and monetary union

---

<sup>1</sup> However, even if exchange rates are not flexible trade flows may be influenced by comparative costs - the comparative (or opportunity) costs 'rule' requiring perfect competition assumptions.

with fixed exchange rates or a common currency. Since, however, factor mobility is somewhat less than in the above case, differences in productivity growth between countries may tend to cause greater divergencies in unemployment levels. This tendency will be particularly apparent if, as a number of authors have argued, monetary integration destroys the 'money-illusion' which at present allows that trade-unions be content with lower real-wage rates in some member states than in others.

Finally, within countries, depressed regions often obtain substantial automatic fiscal transfers<sup>1</sup> in the form of unemployment benefits and other income maintenance payments. Between member states within the framework of full economic and monetary union one could imagine a similar system operating. For reasons stated above, the absence of any such automatic transfer system within the present European Community, must certainly place in some doubt the ability of existing arrangements to cope with the potential regional problems arising from further European integration.

---

<sup>1</sup> Others such as central government grants to local or regional authorities may or may not be largely automatic.

# CHAPTER ONE

## 1.2.

### REGIONAL PROBLEMS : INCOME DISPARITIES, UNEMPLOYMENT, MIGRATION AND STRUCTURAL WEAKNESSES.

#### 1.2.1. Income disparities

Although there are many difficulties in making inter-country comparisons,<sup>1</sup> the overall situation between the member states of the present Community appears to be one of significant and persistent disparities in economic well-being.

As table 1 shows, whilst there was some small tendency towards convergence towards the late 1960's, after 1973 the situation was abruptly reversed, and disparities (measured by the weighted coefficient of variation) at a national level were greater after 1975 than they had been in the early 1960's. Moreover relative progress, if any, made by the two 'poorest' countries - Ireland and Italy - was certainly very small indeed.

Indices of *per capita* gross domestic product at market prices (in purchasing power standards and at current prices and purchasing power parities)

(EC 9 = 100)

	1960-64	1965	1965-69	1970-73	1974	1975	1976	1977	1978	1979	1980
B	97.5	98.9	99.1	103.2	109.6	107.4	107.6	106.2	104.7	104.7	107.5
DK	117.9	121.4	121.2	119.6	115.0	117.2	118.4	117.3	115.3	114.7	113.0
D	114.0	114.9	112.9	114.3	114.5	114.4	115.2	116.3	113.0	117.7	117.9
F	109.7	102.7	104.1	107.3	109.6	111.3	111.5	111.8	112.7	111.2	111.7
IRL	58.2	57.2	58.9	61.0	59.3	59.4	58.1	59.0	60.4	58.9	56.5
I	75.9	75.6	79.0	80.2	80.1	78.1	78.2	77.9	76.8	77.9	79.6
L	126.5	117.1	116.9	122.2	138.6	114.2	114.1	111.1	110.9	113.7	112.9
NL	102.3	104.0	104.4	105.6	107.2	106.4	106.8	106.3	105.2	102.2	100.8
UK	107.9	104.5	101.9	95.2	91.3	92.9	92.0	91.3	91.5	92.0	89.8
Coefficient of variation (EC 6)	16.5	14.6	12.9	13.5	17.0	13.1	13.1	13.1	13.2	13.6	13.1
Coefficient of variation (EC 9)	21.3	20.8	19.6	19.5	22.2	19.7	20.3	19.9	19.3	19.8	20.4
Weighted coefficient of variation (EC 9)	14.7	14.9	13.1	13.4	14.3	14.9	15.2	15.6	15.2	15.7	15.7

Source: European Economy, July 1981, p.112.

Disparities at the E.C. 88 region level, which were even more marked than for the (9) member states, showed a

<sup>1</sup> See for example, E.C.(1971), pp.109-114.

similar tendency towards convergence between 1960-71, and growing divergence thereafter.<sup>1</sup> In 1978 gross value added per inhabitant<sup>2</sup> varied from 191% of the E.C. average in Hamburg, 164% in Bruxelles and 160% in Paris, to 52% in the Naples region, 51% in Sicily and 43% in Calabria.

Apart from the poorest Community regions (West of Ireland and Southern Italy), whilst even the most prosperous countries contain regions where economic capacity is low by Community standards<sup>3</sup>, the most significant grouping of relatively low-income regions (60%-81% of E.C. average) is to be found in the South-West of France, Central Italy, Wales, Northern Ireland, and the Republic of Ireland.<sup>4</sup>

Two points are of note with respect to the poor and low-income regions of the Community. In the first place, they are almost exclusively situated at the periphery of the E.C.. In the second place, their relative position has remained substantially unchanged, as far as comparable statistics indicate, for a period stretching back over one or two decades at least. The U.K. regions, apart from N.Ireland, are newcomers to this grouping, and their relative performance at the

---

1

The weighted coefficient of variation fell from 24.8 in 1960 to 22.5 in 1971, but rose steadily to 25.1 in 1977 (E.C.'The regions of Europe, 1st periodic report, 1981, table D.28).

2

At purchasing power standards (p.p.s.). Gross value added differs from G.D.P. in that taxes linked to exports (around 3% to 9% of GDP are not included).

3

eg. for W.Germany, Lüneburg(81%); Netherlands, Friesland(78%); Belgium, Luxembourg(80%), Hainault(79%).

4

Respectively: Midi-Pyrénées(81%), Limousin(80%), Bretagne(79%), Marche(78%), Umbria(75%), Abruzzi(61%), Wales(80%), Northern Ireland(69%), Irish Rep.(61%). If gross value added per employed person is taken as a measure, it is worth noting that the main difference in the listing is that almost all U.K. regions (apart from the S. East and Scotland) are then included, and the aforementioned regions in W.Germany, Holland and Belgium are excluded.

Table 2.      Gross value added per person in 1978  
at purchasing power parities (EC = 100)<sup>1</sup>

<u>Country/region</u>	<u>1970</u>	<u>1978</u>	<u>+ or -</u> <u>&gt; 2%</u>
<u>W. Germany</u>	<u>(115)</u>	<u>(118)</u>	+
Lüneburg	79	81	
<u>Netherlands</u>	<u>(106)</u>	<u>(103)</u>	-
Friesland	81	78	-
<u>Belgium</u>	<u>(101)</u>	<u>(104)</u>	+
Hainault	87	79	-
Luxembourg (B)	74	80	+
<u>France</u>	<u>(105)</u>	<u>(110)</u>	+
Bretagne	72	79	+
Midi-Pyrénées	74	81	+
Limousin	75	80	+
<u>Italy</u>	<u>(82)</u>	<u>(78)</u>	-
Umbria	71	75	+
Marche	73	78	+
Lazio	88	80	-
Abruzzi	57	62	+
Molize	46	55	+
Campania	56	52	-
Puglia	56	54	
Basilicata	47	57	+
Calabria	43	43	
Sicilia	55	51	-
Sardegna	63	60	-
<u>U.K.</u>	<u>(96)</u>	<u>(92)</u>	-
Wales	86	80	-
N. Ireland	76	69	-
<u>Ireland (Republic)</u>	59	61	

Source: E.C. "Yearbook of Regional Statistics" 1981; E.C. "The regions of Europe - 1st periodic report", 1981.

<sup>1</sup> where below 81% of E.C. average in 1978.

Community level would appear to be closely linked to the decline in relative performance of the U.K. as a whole since around the early 1970's.

To document and define the long-term nature of the regional problem we have therefore chosen to present two series of figures; the first covering regional disparities at the E.C. level, and the second tracing regional disparities relative to the national average (for which figures are available over a much longer time period).

As figure 2 shows, whilst in France the relative improvement in the position of the low-income regions appears to be closely related to the performance of the country as a whole, in the U.K. and the South of Italy, the same argument applies in the reverse sense, and the decline in relative national performance has probably restricted the extent to which these regions have been able to improve their position within the Community.

On the other hand the more central Italian regions (Abruzzi, Molise, Umbria, Marche) all appear to have improved their relative position both in Italy and within the Community over the 1970's.

However, as table 3 makes clear, whilst the French problem regions may have improved their relative position in the Community over the 1970's, this fact can hardly be attributed to any particular form of region-specific dynamism given that in none of the regions considered was G.D.P. relative to the national average consistently higher over the 1970's than it had been in 1962. In general, available statistics regarding regional income disparities within countries suggest that there has been little systematic improvement in the relative position of the less-developed regions within the countries considered in this survey (France, Italy, Rep. Ireland).

Table 3 below gives a broad comparison of trends in regional product and personal income over time for the above-mentioned countries. Since G.D.P. figures do not include transfer payments to households at the regional level, we have also included estimates of disposable incomes (France, Ireland) and final consumption (Italy). In general there are considerable difficulties in obtaining such figures at the regional level. The figures available do however show that such transfers may be very important in reducing interregional differences in regional incomes and standards of living.<sup>1</sup>

TABLE 3.

G.D.P. at market prices in relation to the national average ( per inhabitant).

	<u>1962</u>	<u>1973</u>	<u>1976</u>	<u>1977</u>	<u>1977 (dispos- able in- come)</u>
<u>FRANCE:</u>					
Languedoc	82	73	75	73	89
Limousin	79	70	74	69	88
Poitou-Charentes	75	76	82	75	85
Midi-Pyrénées	74	71	75	71	83
Bretagne	72	74	72	73	84
-----					
<u>ITALY:</u>	<u>1969</u>	<u>1974</u>	<u>1976</u>	<u>1977</u>	<u>1977 (final cons.)</u>
Puglia	72	71	68	71	73
Sicilia	70	70	66	69	81
Campania	67	67	66	67	76
Molise	58	61	63	60	72
Basilicata	53	63	65	63	67
Calabria	52	56	52	55	67
-----					
<u>IRELAND:</u> (Personal in- come) 1969-1973					
Midlands	78	83			
West	76	82			
North West	75	79			
Donegal	73	76			

Source: (i) Basic statistics of the Community  
(ii) NESC Report No. 30.  
(iii) E.C. "The regions of Europe", 1981, p.167.

<sup>1</sup> 'Disposable income' is probably a better measure than 'final consumption' where there may be a tendency to inflate consumption figures, if for example tourism or second residencies are important in the area. Moreover the latter measure does not take into account the extent of regional savings - a low propensity to save may produce a misleadingly high level of final consumption.



Another important point to note is that very substantial differences often arise between measures of GDP per inhabitant and GDP per person employed - these differences being attributable to varying regional levels of economic activity. One measure of such involvement is the dependency ratio which represents the ratio of working-age population to non-working-age population(0-14, and over 65).

In general, dependency ratios tend to be higher in many of the less-developed regions (and countries) than elsewhere, with the result that income per person employed has to be spread over a proportionally greater non-active population.<sup>1</sup> Whilst the approach here has been to take GDP per inhabitant rather than per person employed - which implicitly includes dependency effects - it is perhaps worthwhile to make some comment on overall trends in dependency during the 1970's. Clearly, if dependency ratios are seen to be increasing in the less developed regions this will substantially limit the extent to which gains in income per person employed may influence regional income per inhabitant. In other words, where dependency ratios are increasing, income per person employed must increase at a faster rate relative to national or Community rates in order to avoid regional divergence in terms of per-capita G.D.P..

Comparison of dependency ratios in 1970 and 1977 brings out very substantial differences at both national and regional levels. Whilst these ratios were particularly low in Germany, France, Denmark and the U.K.(from 1.09 to 1.37 in 1977), and somewhat higher in Holland<sup>2</sup> and Belgium (1.86 and 1.55 respectively), by 1977 the dependency ratio in Italy had moved up to 1.88, and in Ireland(Rep.) 1.80.<sup>3</sup> Even greater differences were notable in Southern Italy which by 1977 recorded the highest levels of dependency within the Community. Three examples are of note; the Naples region(Campania), where this ratio increased from 2.08 in 1970 to 2.43 in 1977, Calabria

<sup>1</sup> This is brought out by comparing the weighted coefficients of variation for GDP per inhabitant and per person employed. For the E.C.(9) the figures were 15.7 and 14.4 respectively.

<sup>2</sup> Whilst GDP per person employed in NL was 21% above the E.C. average in 1980, GDP per inhabitant was barely 1% above. The Dutch case seems to be somewhat of an exception in the northern European context.

<sup>3</sup> Source; E.C."The regions of Europe"t.D.5.

with an increase from 2.43 to 2.69<sup>1</sup> and Sicily(2.35 to 2.66).

Clearly then it is important to take into account levels of dependency when assessing regional per capita incomes and observation of movements in the level of dependency may help explain some part of the relative changes that have occurred in the past, as well as providing some insight into how things are likely to change in the future.<sup>2</sup>

#### 1.2.2. Unemployment, migration and population movements.

The unemployment situation in the three "peripheral" countries of the E.C. is given in Table 4 . Again there are a number of problems in comparing the figures for different countries. However, the E.C. sources are broadly comparable. The figures in Table 4 show marked disparities in unemployment rates, not only for the peripheral countries but especially for the peripheral regions within these countries. In the past such regions were typically characterised by high outward migration rates and until the mid-70's this is the case for most of the abovementioned regions (table 5). There are obvious links between the proportion of the active regional population that is unemployed and the propensity to migrate. However, the tendency, at least for France, Italy and Ireland seems to be towards declining rates of interregional migration in more recent periods. The cause is likely to be lower "pull" effects in the central regions due to the development of labour surpluses in these areas rather than an actual improvement in the labour market situation in the peripheral areas. In all three countries the situation is

---

<sup>1</sup> Representing the maximum figure recorded at the E.C. regional level over the 1970's. Figures for Basilicata are 1.99 and 2.36, and for Sardegna 2.45 and 2.46 for 1970 and 1977. Note, Friesland (NL) and Luxembourg(B) mentioned in table 2, also recorded exceptionally high dependency ratios over this period(2.25 and 1.83 in 1977).

<sup>2</sup>

Obviously it is the underlying demographic movements rather than trends in dependency themselves which are important here.

Table 4. National and regional rates of unemployment<sup>1</sup> in the European Community problem regions - 1979.

Country: E.C.(1979) = 5.8% (14-24yrs. = 10.1%).

W. Germany	=	3.0% (3.8%)	Italy	=	7.9% (21.0%)
France	=	6.9% (14.2%)	U.K.	=	5.2% (6.8%)
Netherlands	=	6.7% (6.4%)	Ireland	=	9.8% (11.4%)
Belgium	=	7.3% (12.8%)	Denmark	=	6.9% (11.2%)

-----

<u>ITALY:</u>	<u>% unempl.</u>	<u>(14-24)%</u>	<u>FRANCE:</u>	<u>% unempl.</u>	<u>(14-24)%</u>
<u>*****</u>			<u>*****</u>		
Campania	14.2	(39.3)	Nord	9.1	(17.9)
Abruzzi/Molise	8.5	(28.8)	Bretagne	6.2	(11.8)
Puglia	8.7	(25.2)	Poitou-Chts.	7.2	(17.8)
Basilicata	14.8	(42.7)	Midi-Pyrénées	6.3	(15.2)
Calabria	15.6	(40.9)	Aquitaine	7.6	(13.7)
Sicilia	10.9	(27.1)	Limousin	3.7	(8.3)
Sardegna	13.5	(36.4)	Auvergne	8.4	(19.9)

IRELAND: (1977) = 9.3%

\*\*\*\*\*

North East	=	10.0%	Donegal/N.W.	=	16.6%
Mid-West	=	10.1%	West	=	11.5%

Source: E.C. "Yearbook of regional statistics", 1981; vis.Ireland, E.C."Regional Development Programme-Ireland(annexes)1977.

<sup>1</sup> Extended concept: no main occupation, seeking paid employment. This would seem to be a more realistic measure, as opposed to 'registered unemployment', since - especially under present economic conditions - there may often be very little incentive to actually register as unemployed.

further compounded by the increasing return of migrants, either unemployed or retired to their region of origin.

In the French case, regional unemployment and migration may not always fully reflect the actual situation in the regional labour market. On this point it is notable that relative migration rates for the French regions in table 5 were highly negative over the period 1968-75 for the age-group 20-29yrs -

-4.5% to -9.7%; furthermore, rates of female(active) net emigration were in all 7 cases well above rates for males.<sup>1</sup>

Low unemployment rates may, for instance primarily result from low or negative rates of population growth. The relatively low level of unemployment found in Limousin(4.6% in 1979) must for example be seen against an almost stagnant growth in employment in industry(0.5% from 1968-75 as against France = 7.4% overall) and a negative rate of population growth over the same period.

Such areas, which are of some geographical importance in France, covering most of the Massif Central and some areas in the South West and Centre, appear to have gone full-cycle in the migration process (see schema below). After many years of continual depopulation<sup>2</sup>(migration mainly but also due to the catastrophic implications of the 1st World War on the development of largely isolated rural populations<sup>3</sup>), population age-structures have become decidedly biased towards high age groups and birth rates have fallen to the point where it seems that only a new inflow of younger persons can avoid a collapse of the geographically sparse regional population.

Schema:

<u>Structural factors</u> :	- poor agricultural structures(esp. mountain regions) - lack of or deficiencies in industrial structure - poor urban structure
-----------------------------	--

Resulting in:

- migration of active population.....
- negative influence on age structure.....
- fall in birth rate.....
- continuous selective migration<sup>4</sup>.....
- negative rate of natural population growth....
- population decline

---

<sup>1</sup> E & S (INSEE) No.107.

<sup>2</sup> See Beaujeu-Garnier (1976), "La population française", p.95.

<sup>3</sup> ibid. p.109

<sup>4</sup> mainly active population 20-29 in the French case.

Table 5. Migration and population movements in the E.C. problem regions over the 1960's and 1970's.

	<u>average yearly rates o/oo</u>			<u>natural movement o/oo av.annual</u>		
	<u>1961-69</u>	<u>1970-74</u>	<u>1975-78</u>	<u>1961</u>	<u>1970</u>	<u>1978</u>
<u>ITALY</u> :	(-2.0)	(1.1)	(1.1)	(9.2)	(7.1)	(3.1)
Campania	-8.9	-4.8	-1.5	16.3	13.3	9.7
Abruzzi	-10.6	-0.6	2.8	7.9	4.6	2.8
Molise	-18.0	-2.4	0.1	8.6	4.0	2.2
Puglia	-10.1	-4.1	0.1	15.5	12.6	9.5
Basilicata	-18.6	-10.6	-5.1	15.2	9.3	6.4
Calabria	-16.7	-9.4	-3.6	16.4	10.3	7.5
Sicilia	-12.2	-5.1	-0.2	13.2	9.9	6.7
Sardegna	-10.3	-2.0	0.1	15.6	11.3	7.8
-----						
<u>FRANCE</u> :	(4.1)	(2.2)	(0.1)	(7.3)	(6.1)	(3.6)
Nord	-2.3	-4.4	-5.4	10.2	8.3	5.4
Bretagne	-0.4	1.9	1.6	6.7	5.2	2.7
Poitou-Cts	-1.7	-0.2	-1.2	7.2	4.9	1.7
Aquitaine	5.6	2.8	1.8	3.9	2.9	0.2
Midi-Pyrnès	5.7	3.7	0.6	3.5	2.3	-0.6
Limousin	1.5	2.0	1.9	0.1	-1.2	-3.9
Auvergne	1.9	0.1	-1.8	3.3	2.0	-0.3
-----						
<u>IRELAND</u> :	(-5.6)	(3.2)	(3.8)	(8.9)	(10.4)	(11.1)*
	<u>1966-71</u>		<u>1971-79</u>	/	<u>1971-79</u>	
North East	-3.7	{ Cavan	-3.0		5.6	
		{ Monaghan	3.2		7.5	
Mid-West	-5.2	{ Clare	7.3		8.2	
		{ Limerick	1.5		12.7	
		{ Tipperary	-0.7		9.9	
Donegal	-6.3	Donegal	7.2		7.6	
North West	-9.7	{ Sligo	4.6		5.7	
		{ Leitrim	-2.3		0.0	
		{ Galway	4.6		10.1	
West		{ Mayo	0.2		4.8	

\* max. E.C. in 1978.

Source: E.C. "The regions of Europe-1st periodic report", 1981,  
"Census of population of Ireland", 1979, vol.1, C.S.O.Dublin.

In Ireland (early 1970's), the situation appears to have been fairly similar in the development areas of Donegal, N. West and West. Many of the structural features are similar -- poor agricultural structures, low levels of industrialisation and lack of urban infrastructure. Moreover, the Massif Central and West of Ireland share the lowest levels of population density in the present E.C.

However in Ireland the demographic situation appears to have improved considerably in the course of the 1970's<sup>1</sup>, only one county (Leitrim) experiencing an absolute fall in population over the period 1971-1979. Furthermore, most counties in the West, N.W. and Donegal now have positive net migration balances. A comparison of the 1975 Labour force survey and 1979 population census suggests that these major changes have come about since 1975<sup>2</sup>. Whilst there may be a case for attributing part of these migration shifts to the successful implementation of regional policy\*, it is probable that the larger proportion is however due to the more recent net inflows of migrants returning from abroad (mainly the U.K.) as unemployment rises elsewhere.

---

<sup>1</sup>The key figures are as follows:  
 total population change (1971-79) D.A.s 8.2%, Ire 13.1%  
 natural " " " D.A.s 5.6%, Ire 9.4%.

<sup>2</sup>It is notable that for most D.A. counties net male immigration far exceeds female immigration which is often negative (4 cases).

\* One aspect for example has been a shortage of skilled labour in some new industries in Ireland.

The situation in S. Italy is by contrast one of relatively high population growth rates by both E.C. and national standards<sup>1</sup>. Given the greatly reduced possibilities for outward migration both abroad and to the regions of the North and Centre, the resultant pressures on the supply side of regional labour markets are unlikely to find an escape-value in migration as was the case in previous periods<sup>2</sup>.

Although the above description generally fits the overall demographic situation in S. Italy, a number of mountain regions along the Appenines and in parts of Sicily and Sardegna are more aptly described by our previous analysis. This result is of course due to the level of aggregation at the "regional" level, and, as is often the case, a much more detailed impression is obtained by turning to statistics at the "provincial" or sub-regional level.

The above discussion has been brief but sufficient to show that many diverse factors may explain trends in regional unemployment and migration. In some cases the result is a dwindling of the already sparse regional population which only serves to further limit the prospects of economic growth and the attractiveness of the area for new industry. In other cases, migration can no longer relieve the pressure arising from continuously high rates of population growth. Under these circumstances either unemployment will increase or people will increasingly become drawn into the secondary or dual labour market<sup>3</sup> characterized by low levels of productivity and wages.

In one way or another most of the abovementioned problem

---

<sup>1</sup>Note, this is also the case for the Republic of Ireland as a whole over the 1970's.

<sup>2</sup>The evidence is now that for S. Italy it is interregional rather than international migration which is of major importance in net migration: M.D. Antonio(1979), p. 68.

<sup>3</sup>See V. Lutz (1962) and G. Bull(1978) for further discussion.

regions can be fitted into the schema above. Some regions however, appear to have more or less circumvented the later stages by maintaining consistently high population growth rates. In the case of Italy, such regions often contain some of the most densely populated areas of Southern Italy.

Table 6.                      Classification of the less developed regions of the European Communities(9) in terms of unemployment, migration and population growth  
(see schema)                      - reference to mid/late 1970's.

<u>Net immigration<sup>1</sup> and +ve nat.pop. growth.</u>	<u>Nat.population growth good but emigration or selective migrn.</u>	<u>Nat. pop. growth slow net emig. or selec. emig.</u>	<u>Full-cycle; stag- nant or declining population(contin- uing net migration or selec. migrn.</u>
Abruzzi <sup>+</sup> Molise <sup>+</sup>  Irish Develop- ment Areas.**	Bretagne** Basilicata** Calabria** Sicilia** Sardegna** Puglia* Campania**  Cavan(Ire) <sup>na</sup>	Aquitaine* Poitou-Chts**	Limousin <sup>+</sup> Midi-Pyrenées** Auvergne <sup>+</sup>  Leitrim(Ire) <sup>na</sup>
-----	-----	-----	-----
<u>Cat.1</u>	<u>Cat.2</u>	<u>Cat.3</u>	<u>Cat.4</u>

Source: See tables 4 and 5. France(1980)Sept., INSEE série R, N°45, Mai 1981.

\* Unemployment rate high relative to national average(1979/80).

+ : : : : : similar to national average : : :

\*\* : : : : : very high and/or above 10%.

<sup>1</sup> Figures for post 1978 period for Italy used where available, E.C. data.

Whilst regions in category 1 above have probably avoided cumulative population decline to a greater extent than elsewhere, certain care must be taken in assessing the background to migratory flows. Hence, whilst in Abruzzi/Molise such developments probably indicate a relative improvement in the local labour market, for the Irish D.A.'s the situation is clearly the reverse given that in some cases, changes in unemployment may actually have been positively related to net immigration(eg. Donegal).



Perhaps at this point a few words are in order to clear up the somewhat ambiguous role of outward migration. Although migration may benefit those who are moving, the economic condition of the region of origin may either improve or worsen depending on how the local labour market adjusts. On the one hand outmigration may reduce the competition for available jobs (e.g. S. Italy). On the other hand, as in the case of the West of Ireland and the Massif Central, migration may bring about a process of cumulative decline. This would occur (i) through the selective nature of migration, especially those in the 20-29 age group, that is the young and skilled with direct and indirect effects on population growth; (ii) through adverse multiplied effects on growth and employment in the local economy and (iii) through a reduction in the regional tax base, resulting in either an increase in local taxation or a deterioration in the level of public services -- in any case reducing the relative attractiveness of the area for new industry and resulting in a lowering of regional welfare. The effect would be enhanced, if there are important economies of scale in the provision of public services since this would tend to increase the overall per capita cost of such services.

It should be borne in mind that even in the case where high birth rates are maintained, the above processes may be present to a greater or lesser degree. In particular, as we have noted, the selective nature of migration may lead to a distorted population age structure with relatively high proportions of old persons and children, entailing a high degree of regional dependence on national income support programmes.

### 1.2.3. Structural factors

Here we come to some of the more fundamental issues involved in the origins of the regional problem. More precisely, the observed disparities in employment rates and levels of per capita output can be viewed as the symptoms of such problems, factors dealing with growth rates and economic structure being at the heart of the problem.

The problem will be analysed at two levels; firstly, the distribution of economic activity and employment between the three major sectors -- agriculture, industry and services; and secondly, at the level of individual sectors.

- The impact of economic structure (primary, secondary and tertiary sectors) on regional growth can easily be judged by giving a few key statistics on recent trends in these sectors.

Firstly, in terms of employment, below we give a broad outline of trends in sectoral employment over the period 1970-1977.

The high share of agricultural employment in the LDRs means that their economic structure has a severe negative bias in employment terms, especially considering that rates of decline in agricultural employment tend to be high and fairly uniform as between regions.

Table 7 gives a breakdown of sectoral and total employment for the period 1970-1977 for the less developed areas in France, Italy and Ireland.

We may firstly point to a number of general characteristics; (i) agricultural employment as a share of total employment in the LDRs is in general between one and a half to over twice the national average in the three countries considered; (ii) the share of industrial employment

Table 7: Employment structures(1977) and % change in employment by sector of activity, 1970-1977

	<u>Agriculture</u>	<u>Industry</u>	<u>Services</u>
	%Δ (share country)	%(share)	%(share)
France:	- 21%(9.7)	-7% (37.6)	+11%(52.6)
Italy:	- 34%(12.9)	-10% (39.5)	+30%(47.6)
Ireland(71-75):	- 16%(22.0)	+1.3% (31.4)	+5.6%(46.6)

Employment by sector of economic activity -- Absolute shares 1977 and % change in employment 1970-1977

	<u>agriculture</u>	<u>industry</u>	<u>services</u>	<u>total **</u>
<u>FRANCE</u>				
West <sup>+</sup>	19.2	34.1	46.6	= 100
%Δ (70-77)	-19%	+3%	+8%	= -1.5%
S. West	18.6	31.5	49.8	= 100
	-19%	-6%	+14%	= -1.0%
Auvergne*	16.3	34.6	49.1	= 100
	-24%	-7%	+19%	= -1.4%
France = 2.2% (overall)				
<u>ITALY</u>				
Campania	19.8	26.7	53.5	= 100
	-28%	-23%	+41.0%	= .2%
Abruzzi-				
Molise <sup>‡</sup>	25.3	26.4	48.4	= 100
	-31%	-11%	+44.0%	= .1%
Sud <sup>‡</sup>	24.6	27.5	47.8	= 100
	-36%	-10%	+55%	= -1.8%
Sicilia	21.9	25.9	52.1	= 100
	-26%	-22%	+41%	= -0.7%
Sardegna	16.2	28.5	55.4	= 100
	-40%	-16%	+42%	= 1.7%
Italy = 5.7% (overall)				
<u>IRELAND</u>				
Donegal/NW	37.5	22.6	39.9	= 100 (1975)
%Δ 1971/75	-27.1%	-5.8%	+8%	= -11.0%
West	49.2	19.1	31.8	= 100
	-9.2%	+9.3%	-4.5%	= -4.7%
Midwest <sup>+</sup>	25.7	31.4	42.9	= 100
	-28%	+10.2%	+9%	= -3.4%
N.E.	34.6	33.2	32.2	= 100
	+0.5%	-5.6%	-9.6%	= -4.9%
Ireland =				
- 1.3% (overall)				

\*: only partly classified as D.A. +: largely classified as D.A.

\*\* : Own estimates based on E.C. data.

‡ : Although these have been aggregated for easy reference, it should be noted that % ag. employment in Molise and Basilicata is respectively 40% and 32% of the workforce.

varies between one fifth and one third of total employment, and is in most cases well below the national average; (iii) employment in services (the only major growth sector over the period considered) is relatively low in the French DA's and markedly below the national average in the Irish DA's. In Italy however, the situation is the reverse, and at our present level of aggregation service employment is in general well above the national average. Furthermore, employment growth rates in this sector for both Italian and French DAs in general appear to be well above the national average<sup>1</sup>; (iv) growth rates in total employment are in all cases below the national average. For France and Italy the overall employment situation in the D.A.'s

---

<sup>1</sup> A number of factors should be borne in mind in the Italian case. Firstly, in relation to regional population, tertiary activities are somewhat underrepresented in S. Italy (location quotient 0.8 1976)<sup>§</sup> -- the difference arises because of low participation rates in S. Italy compared to the centre/North. Furthermore southern tertiary employment grew much more slowly than southern population levels over the same period.

Secondly, public administration was overrepresented in employment terms in 1976 in the Mezzogiorno as a whole (l.q. = 1.10). Thirdly, in terms of employment increase in the tertiary sector, the biggest gains came from public administration (3.1% per year from 1970-76), and financial services (4.8% per annum). Rates of employment expansion in commerce, credit/insurance and the civil service were higher than for the rest of Italy (surprisingly employment growth in hotels, communications, restaurants, bars etc., was lower). In terms of population, there was however no overall improvement in the South's tertiary employment during the 1970's. Fourthly, given that "tertiary employment expansion ... in the seventies was not accompanied by any marked efforts at capital accumulation" (E.C.80\*), it is possible that part of the employment take-up in this sector conforms to the dual-labour market theories of underemployment (Lutz '62, Bull '78).

\* The role of the tertiary sector in regional policy. A Comparative study, pp. 82-83 and pp. 197-201.

§ Location quotient 1 = share of sector x employment to total employment (or population) is the same as for the country as a whole.

appears to be one of zero growth and for Ireland absolute decline. It is clear that in most cases employment gains in services have not been sufficient to compensate for losses in other sectors, particularly agriculture;

(v) As concerns employment growth rates, for France and Ireland there are few generalisations to be made. The N.E. of Ireland experienced net employment losses in industry and services, whilst only the mid-West of Ireland and West of France experienced gains in both. In Italy all regions in the South appear to have experienced employment losses in the industrial sector, equal to or greater than the national average. It is however worth pointing out that a large part of these losses are accounted for by the construction sector, due to the completion of a number of industrial complexes in the early 1970's<sup>1</sup>. Another part is due to the general secular decline in employment in small-scale firms in South Italy over the period considered<sup>2</sup>.

In the case of Ireland the decline of tertiary employment in the West and N.E. is quite remarkable and very much in contrast to trends observed elsewhere. Moreover these two regions are the most underrepresented in tertiary employment levels (location quotients 0.68 and 0.69 respectively<sup>3</sup>) in 1975. In the Irish case the problem largely derives from (i) the concentration of tertiary activities in the Dublin area (48.8% in 1975) and (ii) the lack of sizeable urban populations elsewhere. In 1971 only five urban areas exceeded 30,000 inhabitants. This is important given that there is "a very close relationship between

---

<sup>1</sup>Employment in construction and public works fell by 103,000 between 1970-75 (ISTAT).

<sup>2</sup>For a detailed analysis of employment in manufacturing ind. in France and Italy see later. (Ch.9).

<sup>3</sup>E.C.(1980), op. cit., p. 80.

urban size and the scale of tertiary activities in regional centres"<sup>1</sup>.

The above comments lead us finally to consider the implication of the above discussions regarding the l.d.r.'s labour market position and prospects. As we have already noted, the demographic and migratory balances in the West of Ireland and South of Italy imply growing labour market disequilibrium unless migration or the demand for labour increases significantly. The case of the Italian Mezzogiorno is presented below and concerns the estimated increase on the supply side of the labour market over the three-year period 1978-1980 (inclusive both dates<sup>2</sup>). The figures also bring out the extent to which employment decline in the agricultural sector may aggravate this disequilibrium.

Estimates of the growth of the working population 1978-80<sup>3</sup>  
('000 persons)

	<u>Centre/North</u>	<u>Mezzogiorno</u>	<u>Italy</u>
Increase in the labour force	20	230	250
Employment loss in agriculture	180	120	300
Total	200	350	550

Over the same period labour demand in the non-ag. sector in the Centre/North is expected to exceed supply by around 150-200(th's), mainly due to expansion in the service sector. As for Southern Italy, the situation is clearly one of growing disequilibrium in the labour market. In order to

---

<sup>1</sup> Ibid., p. 194.

<sup>2</sup> Casa per il Mezzogiorno - Programma quinquennale per il Mezzogiorno e direttive di attuazione. Rome 1977, p. 10. For discussion see M. D'Antonio(1979), pp. 175-177.

<sup>3</sup> p.76 ibid.

give an impression of the overall situation i.e. with respect to both supply and demand aspects, the table below relates changes in employment up to 1980 with our above figures on labour supply.

Changes in labour supply and demand 1978-1980 ('000)

	<u>Centre/North</u>	<u>Mezzogiorno</u>	<u>Italy</u>
Estimated increase in labour force <sup>1</sup>	200	350	555
Actual change in employment <sup>2</sup>	399	130	529
% $\Delta$ in employment	2.7%	2.1%	
XS of $\Delta$ employment over $\Delta$ labour force	199	-220	$\approx$
Unemployment 1980 (July) <sup>3</sup>	881*	932*	1,813

Given that, overall, gains in industrial employment appear to have been more than offset by the decline of agricultural employment (at the national level and for both "regions"), it is clear that tertiary employment growth constitutes the major component in explaining the net increase in employment in the late '70's. Employment gains in this sector were, in absolute terms, more than three times those of the industrial sector. As concerns S. Italy, the present and growing problem is mainly one of excess labour supply. In general growth rates in services and industry have however become more favourable relative to the rest of the country<sup>4</sup>. How-

<sup>1</sup> M. D'Antonio (1979), p. 176. Note: the estimates of employment loss in agriculture appear to be fairly accurate.

<sup>2</sup> July 1978-July 1980. Own estimates based on ISTAT survey figures (Boll. Mensile, various issues).

<sup>3</sup> Persons actively looking for a job. However, the relative situation is not changed by taking a tighter definition of unemployment. ISTAT survey figures.

\*Of which around 50% were looking for their first job.

<sup>4</sup> Between 1978 and 1980 employment in industry increased by 4.4% in the South and 2.2% C/N, in absolute terms 71,000 and 171,000 jobs respectively.

ever, relative to developments in the supply side of the labour market, such gains are clearly insufficient, and, unless measures can be taken to effectively stimulate labour demand, the net result may be growing unemployment and a renewal of internal migration.<sup>1</sup>

The above discussion has hopefully served to outline the nature of some of the major factors underlying the regional problem in the less developed regions of the E.C. The analysis has been fairly general -- we have considered the regions at a high level of aggregation and given a broad overview of sectoral employment trends, together with some speculation as to the labour market situation in some of the regions considered. We have also attempted to classify some of the different regional problems or "scenarios" in the light of varying demographic trends.

However, it is clear that there are also a number of problems specific to particular regions, or even to areas within these regions. One obvious example is the problem of poor agricultural structures in the mountain areas of the Italian Appenines, the Massif Central in France and the West of Ireland. Such areas are often characterized by subsistence farming, outmigration and abandonment of poor agricultural land. In many cases these problems are compounded by difficulty of access, weak urban framework (and corresponding lack of specialized services), and inadequate industrial structure. The existence of these factors only serves to make such regions even less attractive for new industry. Some types of problems may be directly dealt with -- for example, public expenditure to improve urban structure, roads, telephone services and general living standards.<sup>2</sup>

---

<sup>1</sup> Migration figures for 1978 (E.C. data) suggest that this is now in fact the case. For the French D.A.'s of the West and S. West, such pressures are less evident in view of their relatively low population growth; and for France (1979) net emigration was highest in the northern industrial regions of Lorraine and Nord.

<sup>2</sup> See E.C. (1973) Report on the regional problem in the enlarged Community; see also E.C. (1979) The Regional Development Programmes, esp. pp. 87-89 (France), pp. 136-143 (Italy) and pp. 118-125 (Ireland).



Others may require intervention in particular sectors -- for example financial aid to improve agricultural structures and investment grants/loans to attract industry. Finally, from a welfare point of view it may be desirable to provide income-maintenance programmes for the less well-off. This may occur partly through automatic transfers (pensions, unemployment benefit, child allowances), or through other direct income support measures<sup>1</sup>. Apart from welfare arguments, there are also a number of straightforward economic arguments in support of such programmes. Firstly, income transfers reduce the (negative) multiplier effects of cyclical and secular demand variations and thereby help maintain the local level of economic activity and employment in a downturn.

Secondly, income support for small-scale farmers in a sense helps to compensate for natural handicaps and prevent the abandonment of land in often sparsely populated areas. Apart from helping to maintain population levels in local communities, there are a number of other side-benefits in the form of land-use economies (drainage, prevention of erosion) and the provision of rural amenities and access. In other cases financial incentives to older farmers to withdraw from farming may enable agricultural structures to be improved and lead to more profitable land use.

So far we have analysed the regional problem in a somewhat general and static framework. Almost no mention has as yet been made of the factors which may influence the economic growth of a region or the overall pattern of regional economic development, and we shall now turn to this question.

---

<sup>1</sup>Eg. directive 268/75 on selective income maintenance in hill farming and least favoured agricultural areas.

### 1.3. The spatial pattern of economic development.

In this section we shall consider whether the evidence would suggest any broad systematic pattern of economic activity in the European Community(9).

Close inspection of data on regional incomes, population and the proportion of the workforce in industry/services, provides some evidence for a systematic geographical pattern at the level of the E.C. The overall pattern of population distribution is itself one of fairly high concentration -- at the regional level, around 25% of the E.C. population lives on 6% of the total area, and about 50% lives on 20% of the total area. "A few areas of high concentration stand out; one wide belt among them, the north-western European megalopolis, accommodating some 40% of the total population of the E.C. on no more than 20% of its total area"<sup>1</sup>.

As a guide to spatial growth patterns Map 1 provides an overview of average annual growth of GDP(volume) for the period 1950-70. The advantage of this approach is that it provides us with some idea of the concentration of economic activity over time; a process which may not be so evident when considering GDP per capita or per employed.

Very substantial differences appear, with the southern German regions recording av.annual growth rates of over 7% and other regions experiencing rates of between 1-7%.

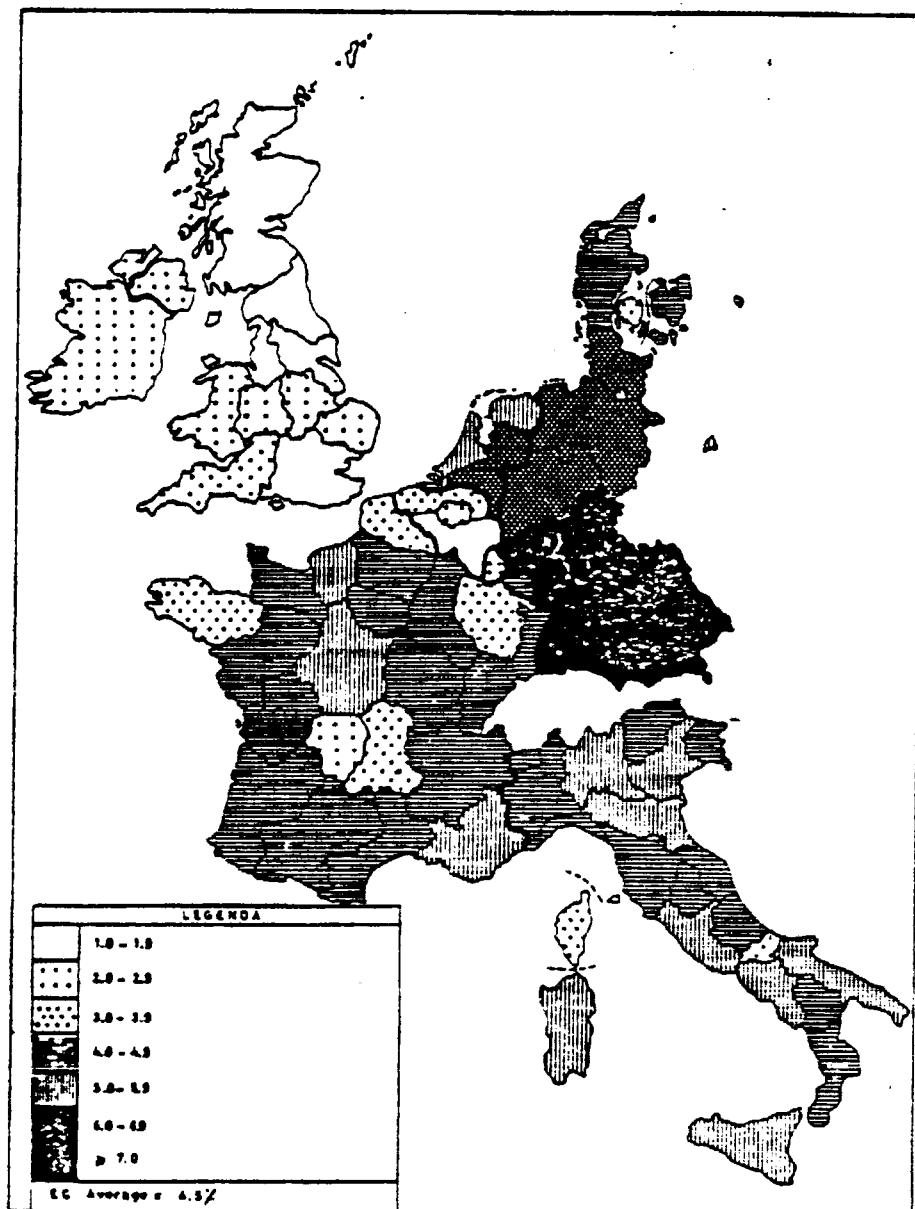
One tendency is clearly that regions with similar growth rates often belong to the same country - suggesting that "national factors determine to a large extent the growth of GDP in the regions of a country".<sup>2</sup>

---

<sup>1</sup> Molle et al(1980),p.158.

<sup>2</sup> ibid p.37.

Map 1. Average annual volume growth of GDP 1950-70(%)



Source: Molle et al(1980), Regional disparity and economic development in the European Community, p.38.

/ Thus for example, developments in the East of France appear to be largely related to growth in France as a whole and totally unrelated to growth in the contiguous regions of southern Germany.

Secondly, in terms of GDP per inhabitant,<sup>1</sup> regional income appears to decline rather systematically with dis-

<sup>1</sup> E.C. Atlas (1979); Biehl et al, Weltwirtschaft(1972).  
See also annex to this chapter.

28

tance to the west of an axis, roughly between Düsseldorf and Oberbayern in South Germany (the Paris region being an exception). In general the poorest regions in terms of per capita income are to be found at the European periphery, that is, the West of Ireland, Brittany, South-West France and Southern Italy.

Conceptually the industrial axis in Europe is concentrated around a line drawn roughly from the North of England to Milan<sup>1</sup>, with a large concentration in what may be termed the economic centre of the E.C., that is the Rhine/Ruhr area.

According to one study<sup>2</sup>, the overall pattern of industrial development in this central area may be generalized as follows. Over the period 1950-60 employment growth in expanding manufacturing industries was highest in the area largely encircling the economic centre as described above<sup>3</sup>, and markedly lower in regions situated towards the European periphery. By 1960-65 there appeared to be some evidence of improved growth in the outlying areas, however the peripheral regions continued to make much slower progress which was furthermore compounded by relatively high employment losses in declining industries<sup>4</sup>.

Although the position of many of the peripheral areas appears to have markedly improved since the late 60's<sup>5</sup>, it is doubtful whether such improvement can be largely attributed to purely market forces given the high levels of ex-

---

<sup>1</sup> See annex. Within continental Europe the axis would appear to run from Düsseldorf to Milan.

<sup>2</sup> C. Clark et al., R.S. 1969, no. 2, esp. pp. 208-209.

<sup>3</sup> pp. 203 and 208. Largely excluding the Benelux countries. "In these countries the disadvantages of the tariff barriers to trade and the comparatively small home markets have outweighed the advantages of location in the centre of Europe". p. 203.

<sup>4</sup> For more detailed figures see for example (Italy) Podbielski (1978)SVIMEZ (France)Chapter 5 in present text (and references), (Ireland) NESC Report no. 4.

<sup>5</sup> That is, in terms of employment growth (see Ch.9).

penditure on regional policies in these areas. Furthermore it seems to be the case that the intensity of industrial spread from the core-regions is inversely related to distance<sup>1</sup>. Hence the regions at the periphery are often the last to gain.

Fourthly, systematic patterns in tertiary employment are a more complex matter to untangle. This problem arises from a variety of factors; firstly, the tertiary sector is itself composed of a number of diverse sectors (public administration, "producer" services and "consumer" services). Some types of services are specifically related to the local market, others, especially producer services may rely partially or largely on demand well outside regional boundaries. Briefly we may categorize the various sectors as follows:<sup>2</sup>

- consumer services, defined as final services provided directly to consumers, essentially serve local populations, and their location normally follows a relatively dispersed pattern. Within this sector we may distinguish publically and privately provided services. Concerning the latter, it appears that in many cases the provision of services is closely related to the size of the market served<sup>3</sup>. This sometimes results in marked deficiencies in some regions. In other cases these deficiencies appear to be explained more by factors such as age-structure, socio-economic structure and proximity to other large towns rather than

---

<sup>1</sup> See Chapter 9.

<sup>2</sup> E.C. (1980) The role of the tertiary sector in regional policy.

<sup>3</sup> Ibid., p. 160.

by variations in income and the overall level of urbanisation<sup>1</sup>;

- producer services, defined as intermediate services provided to other firms, are almost all heavily concentrated in larger urban areas. Furthermore, there is evidence of increasing concentration in such areas<sup>2</sup>. In general it seems that producer services are more usefully analysed in the context of tertiary activities within secondary sector firms<sup>3</sup>. There appears to be some evidence that larger multiplant firms tend to make greater use of internalized services than smaller oneplant firms<sup>4</sup> which have to buy in most of the services they use. Furthermore it is probable that the recourse to business services outside the region in a number of peripheral areas reflects insufficient local producer service provision<sup>5</sup>. Lastly, firms in urbanized areas tend to promote demand for more specialized technical services such as engineers and market monitoring<sup>6</sup>.
- public administration, which on the whole tends to be distributed in a relatively even fashion, although with some notable exceptions. In S. Italy, for example, the population based location quotient for public

---

<sup>1</sup>Ibid., p. 155.

<sup>2</sup>Ibid., p. 194. No such trend was found for consumer services as a whole.

<sup>3</sup>Ibid., p. 160.

<sup>4</sup>Ibid., p. 153, and J.N. Marshall(1979), R.S. no. 6.

<sup>5</sup>See J.N. Marshall(1979), p. 556. The dependence on central areas appears to be fairly high, for example, 50.2% of all service supplies located outside the Northern region(U.K.) were situated in London or the South East, *ibid.*, p. 544.

<sup>6</sup>D.C. Rich(1980), R.S. no 3, p. 171.

administration(.94) is higher than for any other tertiary sector<sup>1</sup>. In France, although concentration is high in the Paris area, public administration quotients<sup>2</sup> show a more even regional pattern than all other tertiary sectors apart from trade and commerce. In the case of Ireland, however, employment in public administration (incl. defence) is overwhelmingly concentrated in the Dublin area<sup>3</sup>. A similarly concentrated pattern of public administration employment is found in Denmark<sup>4</sup>. In the U.K., although there is certainly a high degree of concentration in the Greater London-area and the South East (population based l. q. 1.45 and 1.14 respectively<sup>5</sup>), it is difficult to determine whether this degree of concentration is higher than for services as a whole. Finally for West Germany it appears that employment in local government (incl. social insurance) is more highly concentrated in agricultural than in industrial zones<sup>6</sup>. This suggests a compensatory tendency given it is predicted that, overall, tertiary sector employment will grow especially in highly industrialized zones<sup>7</sup>.

The overall position is therefore that whilst employment in public administration conforms to the general pattern of tertiary employment i.e. concentrated in urban and central areas, there is some evidence for several countries (France, Italy and to some extent W.Germany) that this tendency is less pronounced for public administration than

<sup>1</sup>E.C.(1980), op.cit., p. 83.

<sup>2</sup>Maximum 1.27(Paris) minimum .80(Nord) population based.

<sup>3</sup>In 1966, Dublin accounted for around 47% of employment in public administration as against 28% of total employment ESRI(1975), Report no. 81, p. 68 appendix 2.

<sup>4</sup>E.C.(1980), p. 76.

<sup>5</sup>Ibid., p. 87.

<sup>6</sup>Ibid., p. 79.

<sup>7</sup>Ibid., p. 178.

for the tertiary sector as a whole.

Finally, taking an overall view of the tertiary sector for the E.C. as a whole, it is notable that, compared to primary and secondary employment, "regional differences for employment in services are the least and the proportions the most similar, in every country."<sup>1</sup>

To sum up the above discussion, firstly there is a high concentration of industry along what may be termed the E.C. development axis (North of England, Düsseldorf, Milan). Employment in services however shows a much more dispersed pattern, the main reasons for which should be clear from our previous discussion. It would seem that, although a substantial part of the tertiary sector is linked directly or indirectly with manufacturing industry, factors determining the location of tertiary activities as a whole are very diverse and no single theory appears to be sufficient.

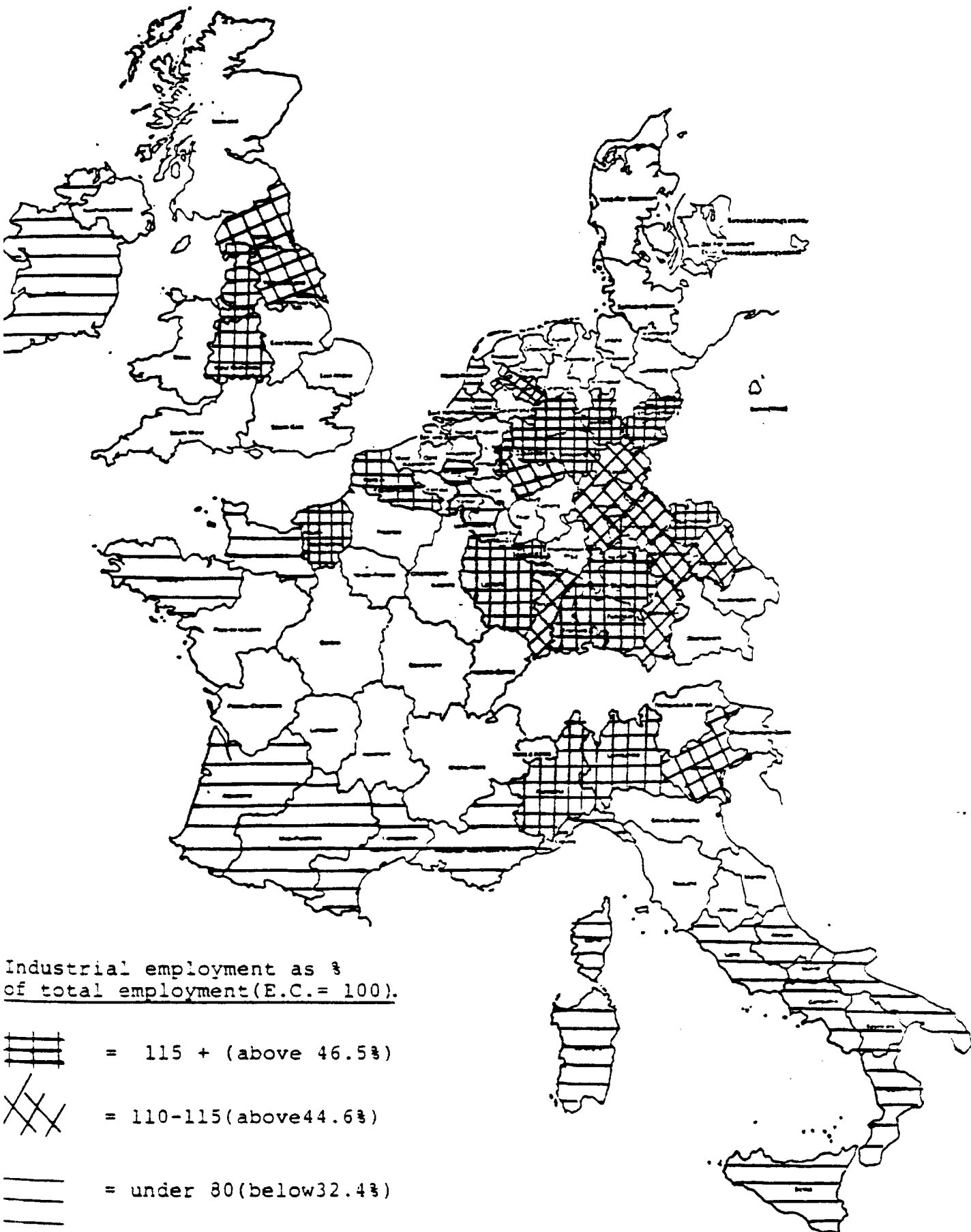
The general impression is therefore one of very substantial and long term regional disparities in economic performance. However, the above discussion leaves a number of important points unanswered. For example, if, in relative terms regional income differences have remained fairly persistent, can it be argued that in real terms everyone has achieved a higher standard of living and therefore regional differences are now of less importance than in say, 1950 or 1960 ? On the other hand can it be argued that interpersonal income differences have even widened so that any 'real' gains have been achieved by some to the exclusion of others ? It is to such questions we shall now turn in the following chapter.

---

<sup>1</sup> E.C.(1978), "Regional Statistics - main regional indicators", p.29. However, given the important influence of urbanisation it may rather be argued that the sub-regional level is a more appropriate basis for analysing spatial differences in tertiary employment.

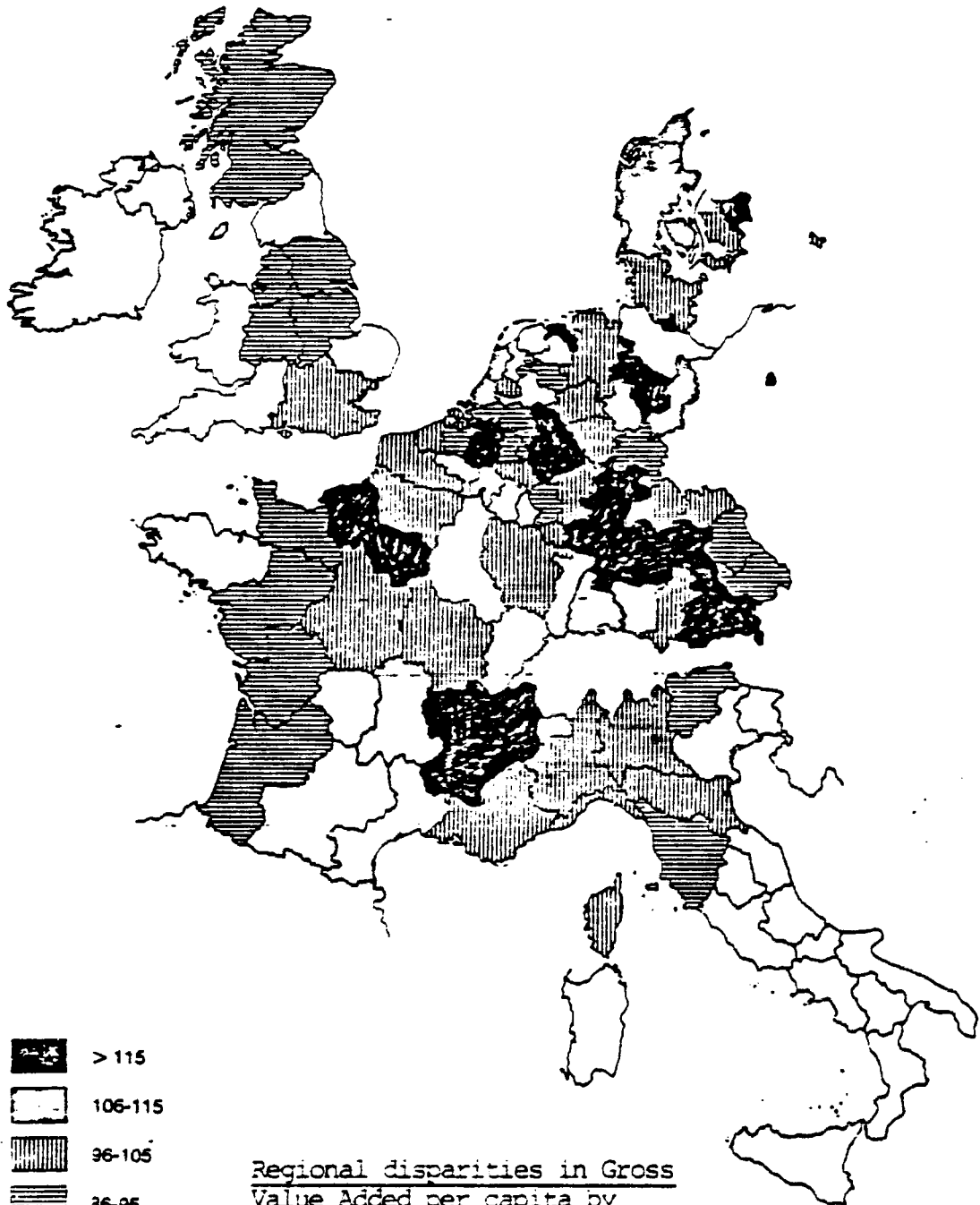


ANNEX



Source: Eurostat. Figs. for mid 1970's.

EUR 9 (PPS/SPA) = 100  
1978



Regional disparities in Gross  
Value Added per capita by  
region and at purchasing power parities, 1978.  
E.C. data.

BIBLIOGRAPHY

- McCrone (1968), "Regional Policy in Britain", Allen and Unwin.
- Robson P. (1980), "The Economics of International Integration", Allen and Unwin.
- Kaldor N. (1971), "The dynamic effects of the Common market", in D.Evans(ed.), "Destiny or Delusion; Britain and the Common Market". London.
- E.C. (1971), "Regional Policy in the E.C.- an analytical survey", Commission of the E.C., Bruxelles.
- D'Antonio M. (1979), "Struttura Economica, Stabilita e Sviluppo del Mezzogiorno", Liguori, Napoli.
- Lutz V. (1962), "Italy - a study in economic development", Oxford.
- Bull G. (1978), "An assessment of Italian post-war regional policy", M.A. dissertation (unpublished), University of Exeter.
- Molle et al (1980), "Regional Disparity and Economic Development in the E.C.", Saxon House.
- Biehl et al (1972), Die Weltwirtschaft - "Regionale Einkommensverteilung in der EWG", pp.64-78.
- Clark et al (1969), Regional Studies No. 2, "Industrial location and economic potential in W.Europe".
- Podbielski G. (1978), "25 years of special action for the development of Southern Italy." SVIMEZ/Giuffre, Milano.
- Marshall J.N. (1979), "Ownership, organisation and industrial linkage: a case study of the Northern region of England." Regional Studies, No. 6.
- Rich D. (1980), Regional Studies, No. 3.



## C H A P T E R      T W O

---

Poverty at the periphery - regional inequality and the geography of welfare.

---

### - Foreword

#### 2.1. Introduction to country studies on the extent of poverty and low-incomes in the less developed regions.

##### - 'Poverty' and estimation of the poverty line.

- absolute-poverty measures
- relative-poverty measures
- 'official' definitions of poverty

##### - Related questions on methodology.

#### 2.2. Italy

#### 2.3. The Republic of Ireland

#### 2.4. France

#### 2.5. Conclusions

### Annex.



## Foreword

Whilst in Chapter 1 we were able to point to several indicators of the economic capacity and performance of the less developed regions in Europe, from another point of view it cannot be said that any great insight was obtained into the distribution of incomes (or living standards) within such regions - in other words, the geography of welfare.

In point of fact, very little appears to be known about the distribution of incomes within regions, or for that matter, whether intra-regional disparities are greater than inter-regional. The question is however of some importance in the present context; if it is seen to be the case for example that low-income regions (measured in G.D.P. per capita) are characterised by rather insignificant intra-regional disparities, whilst the reverse is the case for relatively high income regions, then, at the limit, it may result that those persons with the lowest incomes are almost entirely situated in the latter, and the 'regional problem' as such may have been unduly overstressed. Of course, if the opposite holds, traditional indicators will tend to underestimate the regional problem and the spatial nature of income disparities.

In a dynamic context even more questions of this nature remain to be answered. Conventional wisdom would have it that as the average level of economic well-being in a country increases, so the problem of poverty and destitution in certain sectors of society should gradually fade in importance. Poverty as such would then become primarily a relative concept ('relative deprivation'), in the sense that for a person to be in poverty would simply imply being below some minimum standard of living regarded as acceptable for the society in question. A report of the British Social Science Research Council defined the relativistic view as follows,<sup>1</sup>

" People are 'poor' because they are deprived of the opportunities, comforts and self-respect regarded as normal in the community to which they belong. It is, therefore, the continually moving average

cont/

---

<sup>1</sup> S.S.R.C., "Research on Poverty", London, 1968, p.5.

.. standards of that community that are the starting points for an assessment of its poverty, and the poor are those who fall sufficiently below these average standards".<sup>1</sup>

Nevertheless, the notion of poverty in some 'absolute' sense cannot be dispensed with so easily, even in some of the most highly advanced western economies. For example, one official U.S. study reads,

"Our analysis thus tends to cast some doubt on the wisdom of relying too heavily on aggregate demand or the job market as a means to combat poverty... it is... surprising to find such a large number of families whose economic status remained impervious to the general prosperity of the time".<sup>1</sup>

In part to avoid this type of confusion, an essentially 'absolutist' approach (see introduction) towards defining poverty will be taken in the country studies which follow, the reasons for which will be made clear shortly.

The second main aim of this study is to provide a better understanding of the (potentially numerous) causes of poverty. Specifically, it will be instructive to see whether such inequalities take on an essentially socio-economic nature (ie. only some groups of workers, unemployed or retired), in which case sectoral or (household) income-maintenance programmes are called for; or, whether inequalities are primarily of a regional nature - that is, socio-economic groups are equally 'poor' in particular regions - in which case policies to promote regional economic development might be more appropriate. Of course, the actual result may in fact suggest the necessity for some combination of the two. Furthermore, it should also be born in mind that in practice, the implementation of income-maintenance programmes towards certain sectors of the community may have a significant influence on the local level of disposable income in certain regions, and on the spatial distribution of incomes in general.

In essence, the case for regional policy is dependent not only on its ability to promote industrial development, but moreover, on the ability of the latter and economic growth in

<sup>1</sup> T.F. Kelly, article in Report to Presidents Commission on Income Maintenance Programs, Technical Studies, Washington D.C. 1970, p.47



general, to achieve convergence in terms of the spatial configuration of welfare, and it will be interesting to see whether the following studies suggest any link between the two.

2.1. Introduction to country studies on the extent of poverty and low-incomes in the less developed regions.

To deal with the background and thinking behind present policies of many Western European administrations and institutions towards the poor often entails tracing back their origins for a great number of years. Very little attempt appears to have been made by such bodies in recent years to take a new look at the problem of poverty, to redefine the concept, or to examine the actual living conditions of those firmly situated at the bottom of the economic and social ladder - let alone to consider any possible regional dimensions of the problem. Poverty it would seem, is a question with which few governments really appear to want to get to terms.

In part perhaps, the very difficulty of defining 'poverty' may provide one explanation for such reticence - and in the discussion which follows on alternative concepts of poverty, the alternatives put forward should perhaps be interpreted more in terms of different definitions that are possible, rather than in terms of a search towards some 'true' or scientific concept of poverty, which quite simply, does not exist.

In dealing with the definition and measurement of poverty in an operative context, certain major issues arise, of which the most important are;

- (i) definition of the concept used,
- (ii) definition of the poverty line and the unit in question (ie. household, family or individual),
- (iii) examination of the data available and the extent to which such data are amenable to the analysis at hand (eg. level of aggregation),
- (iv) attempts to measure the depth of poverty ('poverty-gap') overall, or for particular groups in society.

Much of the following discussion will be taken up with the first two issues, without however attempting anything more than an overview of the main questions involved.

- Poverty and estimation of the poverty line.

There are essentially two fundamental positions which can be taken towards the definition of poverty. The first is to define poverty in absolute terms, which generally implies some definition of the minimum level of consumption or access to certain necessities which are essential to survive. The second is to define poverty in relative terms, given a particular 'strategic' ratio in terms of consumption/income for the unit chosen to the average level for the society in which that unit is living (eg. 50% of average income). Certain difficulties arise in defining and assessing both of these approaches. Compromise solutions exist and some will be mentioned below.

- 'absolute' poverty measures,

Concerning the absolute approach problems arise particularly in defining what represents a minimum necessary level of consumption or income. If consumption (food and other essential items) is taken as a reference point, then some decision on what constitutes a minimum-subsistence diet has to be reached. Unfortunately, much room for discussion still remains concerning such diets; in particular with respect to the minimum levels of certain nutrients required for good health<sup>1</sup>. Even granted the possibility of arriving at some minimum cost diet by maximising the combination of individual nutrients (calories, minerals, vitamins, fats etc.) subject to given budget constraints and minimum levels for any particular nutrient, the poor themselves can hardly be expected to be very proficient at such an exercise. Apart from such obvious questions of efficiency in purchasing<sup>2</sup> an equally important consideration is that consumption will often be largely dictated by taste and national (or even regional) custom, and quite clearly the two questions are even to some extent interconnected.

Consequently, a good case can be put forward for basing the poverty line (even where an absolute approach is adopted) on some observed consumption pattern (that is, of low income groups) typical of the society considered. By taking account of actual consumption it is then possible to arrive at some minimum subsistence level which satisfies not only physical needs but also allows some marginal element to cover additional expenditures which derive from customary practices<sup>3</sup> as well as some acceptable degree of inefficiency in purchasing.

If this general approach is adopted (eg. Italian study), there are a number of reasons to prefer the use of consumption as against income statistics (this is also true of other approaches to measuring poverty - see on).

In the first place, and in general, short-term variations in income are unlikely to be fully reflected in terms of equivalent changes in consumption patterns, since to some extent individuals or households may be able to draw upon savings or borrow money from other sources.

Secondly, apart from particular difficulties which often arise concerning underreporting of incomes, the process of arriving at disposable income (total income less direct taxation plus transfers) is rarely straightforward - often simply because non-taxable income is not stated in declaration of taxable income.

Thirdly, and most important, the transition from defining poverty in terms of consumption (food and other essential items) to arriving at some minimum level of income presents a number of additional problems, not least that of allowing for other budgetary items (e. housing), actual expenditure on which may in practice vary substantially from case to case even amongst 'poor' households<sup>4</sup>.

Lastly, whilst measurement of poverty in terms of (food) consumption essentially limits the 'efficiency' problem mentioned earlier to this sector of expenditure, adoption of an income measure probably extends this problem to a much greater degree (to the extent that less-essential items are ipso facto included). The 'efficiency' problem was at an early

stage recognised by Rowntree(1901)<sup>5</sup>, who distinguished between 'primary' poverty where total earnings were insufficient however efficiently consumers allocated their incomes, and 'secondary' poverty resulting from some portion being absorbed by expenditure on other non-essential items.

Hence, if an absolute definition of poverty is adopted, there are certainly good reasons to prefer measurement in terms of consumption.

Alternatively, some sort of semi-absolute measure - which implies acceptance of the fact that what society regards as 'necessary' changes over time - may be adopted in preference to tighter definitions which of necessity require calculation of minimum subsistence diets. This approach may be particularly useful if, for example, income data only are available(e.g. France), or in the case where poverty is measured by reference to certain essential goods.

#### - relative\_poverty\_measures,

Relative definitions usually imply the measurement of poverty in terms of some ratio of consumption or income of the unit in question (household, family or individual) to the average level for the society in which that unit is living. When studying relatively advanced societies, and also to enable broad comparisons to be made on a similar basis, it now seems fairly generally accepted that some type of relativistic definition is more appropriate. In this sense, a person could be somewhat above a mere subsistence level but still be classified as 'poor' relative to the average standard of living in the society to which he/she belongs.

It goes almost without saying that adoption of this definition will imply very different standards of living for the 'poor', both over time where real income is rising, and between countries where average income differs significantly. Moreover, the term 'poverty' itself tends to lose significance and meaning since there is no longer any logical connection made between the definition of poverty, and what the 'poor' actually consume or the living standards they actually experience.

- 'official' definitions of poverty,

Official 'poverty' lines are rare, but more often various public income-maintenance programmes or minimum-wage legislation may provide some insight into what the state at any one time regards as a minimum acceptable standard of living.

Such 'definitions' are useful in that they provide a fairly objective means of defining poverty, and , of course the question to what extent official objectives have in fact been achieved is, in itself of some importance.

Nevertheless, certain problems again arise when comparing results over time and between countries. Some countries may be more 'generous' than others<sup>6</sup>, or again, the use of different official benefit levels (eg. pensions, unemployment benefit, minimum wages etc.) relating to different groups in society may imply that inter-country comparisons should be interpreted with a great deal of care.

Another problem is that, over time, upward movements in the real value of official 'poverty lines' may result in an increase in the observed incidence of poverty even though, in some sense, the 'poor' as a group may have become better off. To take one example, in the U.K. concern has been noted over the failure to reduce the proportion of the population (around 3 to 4 % of households) below the official poverty line( ie. Supplementary Benefit scale rate). And as one author has remarked, "it is often forgotten that in real terms... this poverty line is twice as high as in 1948".<sup>7</sup> However, in this particular case, the actual facts are somewhat more complex than they would first appear. Whilst the above statement is certainly quite correct<sup>8</sup>, it should also be noted that the 1948 scale rates were in fact based on Beveridge's 1938 calculations<sup>9</sup> of minimum subsistence which were, in turn based on Rowntree's 1937 'subsistence diet (untested). Moreover, the resulting 1948 benefits actually turned out to be lower than those proposed by Beveridge, being updated by only 56% in spite of the fact that the cost of living had actually risen by 73% between 1938 and 1948<sup>10</sup>. More recently it has been argued, (i) that the Retail Price Index(RPI) does not adequately reflect changes in the cost of living for low-

-income households<sup>11</sup>, and (ii) that the scale-rates for dependents (again, based on Beveridge 1938) grossly underestimate the actual cost of maintaining a child<sup>12</sup>. Lastly, rent is not allowed for in payment (by D.H.S.S.) of the Supplementary Benefit (together with other major items of bedding and furnishing), and, although an allowance is paid separately by the Supplementary Benefits Commission, the amount of this allowance in practice rarely reaches 100% of actual rent, and is often considerably less.<sup>13</sup> Taking this reasoning to its logical conclusion, it seems quite clear that an individual who is totally dependent on Supplementary Benefit (plus rent allowance) and therefore at the 'official' poverty line, is either, (i) supposed to do without furnishing, or (ii) deduct such expenses from his/her allowance for food and other necessities.

Hence, in the case of the U.K., whilst an official poverty line can be said to exist, many doubts remain when assessing whether in fact it can be termed adequate. Moreover the U.K. system provides an instructive example in that, in a unique sense it can be seen to derive from some 'scientific' basis. In many other countries (including those covered in the present survey) it is often extremely difficult to interpret equivalent benefit payments, either because there is little information on what types of expenditure they are actually supposed to cover, or more simply because there is little indication of how they were arrived at in the first place.

As a result, whilst on the one hand official or quasi-official poverty-lines might seem to present a fairly objective standard on which to base an analysis, on the other, the interpretation of benefit levels must always be treated with a great deal of care.

In conclusion, choice of the operative concept to be adopted will depend very much on, (i) purpose of the analysis, (ii) type of country or countries under consideration, and (iii) available data. Generally speaking, in the following studies on Italy, Ireland and France, a fairly restrictive approach (semi-absolute) has been adopted, the main reason being that a purely relativistic approach would almost certainly

have abstracted from what is a very real problem - that is, the existence of a substantial degree of hardship amongst a very significant proportion of the present population of the European Community(9).

Nevertheless, certain problems have arisen with this approach - not least of these being that the respective poverty lines adopted must certainly be expected to represent rather different real values and standards of living (although considerably less than if a relativistic definition had been adopted). Given the problems involved, it was not however considered feasible to compare the real values implied by the respective poverty lines<sup>14</sup>. The broad lines of approach may however be classified as follows in descending order of restrictiveness or severity;

- for Italy, an absolute approach was taken based on a minimum subsistence diet (untested) and consumption data,
- for Ireland, income(survey) data were used and the poverty line was based on U.K. Supplementary Benefit levels(see above),
- for France, disposable income data were used, and the poverty line was calculated on the basis of minimum-wage legislation.

Broadly speaking, the French poverty-line almost certainly corresponded to a somewhat higher standard of living than that adopted for Ireland or Italy - however, this is in some sense unavoidable given that real per capita income in France (PPS) was around 40% higher than in Italy and 80% higher than in Ireland around the mid-1970's,<sup>15</sup> and that minimum-wages and benefit levels must, to some extent, be expected to reflect such differences. In turn, the Italian poverty-line being based on a minimum subsistence diet, is probably somewhat lower than that for Ireland, and some adjustment has been made to facilitate a rough comparison between these two countries<sup>16</sup>.

Hence, with certain qualifications (mainly relating to data sources) the abovementioned poverty lines may be considered to be broadly comparable, if, at the same time one takes into account the very substantial differences in average levels of G.D.P. per capita of the respective countries. In this sense a semi-absolute evaluation of poverty may best describe the overall approach adopted.

### Related questions on methodology

Having examined the theoretical considerations involved in the following surveys, it now remains to enlarge upon some of the more important methodological questions.

#### - unit of analysis,

In deciding upon the unit of analysis to be adopted, data availability is often in practice one of the major determining considerations. However, since this in turn raises certain interpretive problems, it may be useful to discuss the alternatives available.

Basically the choice of unit is limited to three possibilities; the individual, the family, or the household. However, since a large part of consumption in most cases involves a joint-decision (apart from single persons living alone), measurement of poverty in terms of the individual ('head-count' measure) will necessarily imply some form of disaggregation from one of the other two alternatives. As will become clear, this transition itself presents certain difficulties, mainly related to the question of income-sharing.

In general, the household unit is often chosen, being considered as the most appropriate unit as concerns spending decisions. However, at this level the unit may in fact comprise two or more sources of earnings such that resource-sharing may be present to a greater or lesser extent. Equally, the absence of resource-sharing in households situated above the poverty-line may lead to neglect of individuals in the analysis who, to all intents and purposes may in reality be subject to some degree of poverty.<sup>17</sup> More evident perhaps, where the size-distribution of households in poverty does not correspond to that for the population as a whole, there may clearly arise certain numerical differences as between household and head-count measures.

In moving from household measures to head-count estimates, detailed information is required on household composition, and again, problems arise concerning income-sharing. Inevitably, summation of all household members will include



some individuals who are better-off(ie. above poverty-line). On the other hand, and perhaps more important(at least insofar as not reflected in poverty-gap measures) certain 'poor' will be excluded simply because they do not belong to a 'poor' household (see above).

- adjustment of poverty-line,

Definition of the poverty-line for any particular household or family unit presents another set of problems. It is intuitively clear for example that if the poverty-line for a single adult is estimated to be £x per week, the equivalent line for a couple with three children cannot be deduced simply by multiplying £x by a factor of five. In general it is agreed that the individual needs of children are somewhat lower than those of adults, and that there are certain opportunities for achieving economies of scale when several people live together (eg. housing, purchasing and food). Adjustment to take account of these factors is achieved by means of 'Adult Equivalent Scales'(A.E.S.) which are applied to the family or household unit. The precise nature of A.E.S. varies somewhat depending on which type of approach is adopted(ie. absolute, relative or 'official' based) and whether the poverty-line is set in terms of food(or 'essential') expenditure, or total expenditure/income. However, the basic idea remains the same.

Determination of appropriate A.E.S. is an extremely complex affair, and the approach adopted in the following surveys has been to use 'official' scales when dealing with income-based poverty-lines(Ireland, France), and medical scales when dealing with food consumption estimates(Italy). Whilst there may always be some disagreement on the adequacy of such scales (see back), a process of re-estimation would quite clearly have been outside the scope of this paper.

- the poverty-gap,

Finally, we come to consider measures of poverty which also take into account the degree to which the unit considered actually falls below the adopted poverty-line. This difference

is defined as the 'poverty-gap', and alternatively, represents the amount of additional income or consumption which would be required to bring the unit in question up to the poverty-line. From an analytical viewpoint such estimates are clearly of great interest in assessing the depth of the problem<sup>18</sup>, and making comparisons between countries, over time, or between socio-economic groups at a given time.

Secondly, from a policy viewpoint, head-count measures used alone may give a somewhat misleading impression of the effectiveness of redistributive policies or other changes which may affect the distribution of incomes. For example, a policy aimed at improving the incomes of certain groups very largely situated just below the poverty-line, may have a significant impact in reducing the number of poor but result in very little change in the absolute poverty-gap. Again, changes which resulted in a transfer of income from households below the poverty-line to those above, would leave the head-count measure unaffected but result in an increase in the poverty-gap measure.

In conclusion, the poverty-gap approach provides an important policy tool in defining, i) the depth of the poverty problem, ii) the socio-economic groups mainly concerned, and, iii) the likely magnitude of resources necessary to achieve a given reduction in poverty. Needless to say, statistical sources often pose restrictions to the type of analysis one would like to perform, and this problem is particularly relevant for poverty-gap measures which require more detailed information than is always necessary for head-count estimates. Consequently, we have included poverty-gap measures where this has been possible - otherwise relying on partial analysis to estimate the depth of poverty for particular groups where figures are available.

One point of emphasis in the following studies concerns the potential role of the state in eliminating poverty. As a number of previous studies have pointed out, although in many Western European countries poverty is by no means negligible in terms of the numbers involved, in terms of resources required to eliminate poverty (ie. based on poverty-gap measures) relatively small amounts would be required, either in relation to total government expenditure or for that matter in relation

to existing levels of expenditure on income-maintenance programmes<sup>19</sup>. However, given the need for specific programmes to eliminate such conditions at their source, a number of approaches may be required, including for example the whole array of income-maintenance benefits, as well as sector specific programmes and subsidies (eg. viz. mountain-farming areas), regional development programmes for less-developed areas, and various types of legislation ranging from minimum-wages to land-use control.

The following studies will hopefully serve to highlight the nature, causes and spatial dimension of poverty, as well as pointing to some directions relevant policies could perhaps best follow. In the last instance it is to be hoped that the necessary political will to alleviate poverty shall not be lacking, and that just concern for the poor will eventually find some expression in future Community policies.

---

#### NOTES

- 1) For example, even with respect to simple energy requirements it has been found that there is a wide range of necessary energy intakes within any age-group. Widdowson, 1947, "A study of individual children's diets", London, H.M.S.O.. In a historical context, an example deriving from analysis of the accounts of a charitable institution in Normandy and conditions therein (hôpital general de Caen, 1725), shows up some of the possible consequences of inadequate diets on physical conditions;

"Bread and peas provided in the hôpital nearly 90% of total calories, some 3,000 per capita daily; the diet consisted thus of an excess of vegetable proteins and a gross deficiency of fats. Moreover two vitamins in particular were lacking. The diet as a whole provided scarcely half the required amount of vitamin D. This serious deficiency had fatal consequences because it encouraged rickets, skeletal calcification with associated deformities. Above all, the children and adolescents who had to work so young suffered.... Even worse was the near total absence of vitamin C. This explains the vulnerability of the poor to scurvy, as well as their low resistance when faced with heavy exertion, cold, or infection." Lis and Soly (1979), "Poverty and Capitalism in Pre-Industrial Europe", Harvester Press.

The link between physical condition and poverty was also stressed by Rowntree, 1901, in his anthrometric study of children.

- 2) From one U.K. survey it would appear that very substantial differences in purchasing efficiency arise as between households, although in general, low-income groups and larger families would seem to purchase foodstuffs more efficiently than other categories. See, Walker and Church, "Poverty by administration: a review of supplementary benefits, nutrition and scale-rates", *Journal of Human Nutrition*, 1978, No.32, pp.5-18.
- 3) For example, in Rowntree's calculation of the minimum subsistence level, the least-cost diet adopted included some allowance for the consumption of tea. Rowntree, 1937, "The Human Needs of Labour", Longman, London.
- 4) An analysis of low-income families in France for example found that whilst some 40% occupied rented dwellings, the remaining 60% either owned their dwellings or paid nothing. The quality of housing occupied is, of course another matter. INSEE, serie M, no.86. Jan. 1981, p.145.
- 5) B.S. Rowntree, 1901, "Poverty; A Study of Town Life", Macmillan, London.
- 6) eg. O.E.C.D., "Public Expenditure on Income-Maintenance Programmes", Paris, 1976.
- 7) Ibid., Table 26.
- 8) W. Beckerman, "The impact of income-maintenance programmes on poverty in four developed countries", I.L.O., Geneva, 1979.
- 9) See, Social Security Statistics - 1975, Dept. of Health and Social Security, 1977. Since 1948 the Supplementary Benefit Level has been continuously adjusted in line with changes in the average wage of male manual workers, and more recently, in line with the R.P.I..
- 10) W. Beveridge, 1942, "Social Insurance and Allied Services", H.M.S.O., London. As a number of authors have argued, it was quite an unfortunate and unexpected event that Rowntree's (1937) restrictive definition of poverty - adopted in order to support his argument that poverty did exist - subsequently evolved into the administrative basis around which the post-war social security system was eventually constructed. See, Walker and Church (1978), Atkinson, 1970, *Camb. Occ. papers*, No. 18, Kincaid, 1975, "Poverty and Inequality in Britain", Penguin, George(1973).
- 11) V. George, 1973, "Social Security and Society", Routledge and Kegan Paul, London. Furthermore, Beveridge had allowed less for an individual at subsistence level than Rowntree (by omitting the allowance for sundries), and made no allowance for the increased cost of living between 1936 and 1938. He did however allow an element of 6% for inefficiency in purchasing (in respect of adults only). Walker and Church, 1978, p.11.
- 12) Low Pay Unit, 1977; evidence to the Royal Commission on the Distribution of Income and Wealth, unpubl. paper.
- 13) Piachaud D. 1979, "The Cost of a Child", Child Poverty Action Group, London. See also, Walker and Church(1978).

- 14) No allowance for furnishing is made, since the amount of the subsidy is based solely on rentable value less furnishing.
- 15) The difficulties involved in such a task are quite substantial - adjustment purely on the basis of current exchange rates, would not take into account differences in purchasing power as between countries, and, even if adjustment were possible in this latter respect, the end result would certainly not reflect cost of living differences for low income families, given, in particular that consumption patterns may differ substantially between countries for such groups.
- 16) "European Economy", July 1981, table 7.2.(in purchasing power standards and at current prices and purchasing power parities).
- 17) See text; reference relates to the Italian poverty-line + 20%.
- 18) The relevance of this point(especially concerning retired persons sharing a household) is brought out in one of the studies quoted viz. France. In general however, very little is known about the important question of income-sharing.
- 19) For example, M.C. Sawyer, "Poverty in some developed countries" O.E.C.D., 1975, - "Estimates based on our 'standardised' poverty-line indicate that a shift of resources equal to 1% of GDP to the poor could virtually eliminate poverty(as defined by that poverty-line) in most countries..."(viz. Bel.,Canada,Australia, France,Ire.,U.K.,U.S...). p.10. See also present text with respect to study on Italy which largely confirms this order of magnitude.

## 2.2. ITALY

The approach adopted in this survey is similar to that for Ireland. Consumption statistics form the basis of the study and are supplemented by regional and provincial figures for net domestic product per person.

The reasons for this should perhaps be explained. Although national expenditure surveys are generally of wide geographical coverage, problems of statistical significance are encountered when these are broken down not only by region, but by income category and family size. For Ireland we were able to give statistics by region and income category and by region and family size. For Italy, we must use consumption figures by consumption category and family size, by region and family size, by employment sector and region, and by employment sector and family size. The first of these statistics enables us, once having determined the poverty line in terms of consumption, to give an accurate estimate of the number of persons below this line. The last three groups of statistics enable us to give an idea of the magnitude of regional variations in consumption. The statistics used in this paper are derived from the annual I.S.T.A.T. survey<sup>1</sup> "I consumi delle famiglie" for 1975.\*

The first set of figures we have derived are shown in table 1. They give an overall view of national disparities in total consumption levels. Over 14% of the population belonged to households where consumption per person was below Lit. 50,000 per month. In other words their consumption was less than 46% of the national average.

---

<sup>1</sup>This annual survey covers 36,000 households, by means of a rolling monthly sample of 3,000 households.

\*Autoconsumption of farm produce is one of the main problems encountered in such surveys - particularly important with regard to Italy, where this is very common. The ISTAT survey correctly measures such consumption at market prices.

TABLE 1

Household consumption per person by family size. (1975)

(a) Household consumption per person per month under L.30,000

<u>N° persons in household</u>	<u>% of households in category ≤ L.x</u>	<u>N° households</u>	<u>N° persons</u>
2 persons	1.5	54,255	108,510
3 persons	.74	27,343	82,029
4-5 persons	1.14	62,050	273,020
6+ persons	11.78	186,006	1,264,841
		Total	1,728,400
			= 3.05% of population

(b) Household consumption per person per month under L.40,000

2 persons	4.5	163,000	326,000
3 persons	2.38	88,000	264,000
4-5 persons	5.0	272,000	1,197,000
6+ persons	20.0	316,000	2,149,000
		Total	3,936,000

(c) Household consumption per person per month under L.50,000

1 person	6.5	138,000	138,000
2 persons	8.7	315,000	630,000
3 persons	5.6	207,000	621,000
4-5 persons	12.64	688,000	3,027,000
6+ persons	34.8	550,000	3,740,000
		Total	8,156,000

= 14.5% of  
population

Note: av. consumption per person per month  
in 1975 for the whole of Italy was L.110,200

30,000L. .... represents less than 27.2 of this figure.  
40,000L. .... " " 36.3 " " "  
50,000L. .... " " 45.4 " " "

Table I is not meant to give any more than a general idea of the distribution of low income households. In practise we should look at consumption not in terms of lire per person, but per adult equivalent unit. In other words we must recognise the fact that adults and children have different consumption needs. This procedure is effected quite simply by the use of coefficients which will be described shortly.

We shall return to total consumption figures later when we compare regional and occupational consumption levels. For the purposes of estimating with more precision the number of persons in poverty we have used only food consumption statistics and the method adopted is outlined below. For mainly descriptive purposes, the poverty line in terms of total consumption is then estimated by assuming that food expenditure is equal to 56% of total expenditure (this is the observed ratio for a three person household at the margin).

This approach was thought to be most correct for the following reason, that it is impractical to make any meaningful estimate of the necessary expenditures on non-food goods (largely housing). If a family spends Lit. 18,000 per month on rent, this tells us next to nothing about the type of accommodation they are likely to be renting. The problem is due to the existence before 1978 and the "equo canone" law relating to rents, of two separate housing markets. Tenants who had occupied their dwellings for any length of time generally benefited from long periods of stable rents whilst those new to the market or changing accommodation had to pay the market rate



which was often substantially higher. The general conclusion is that only a very broad correlation exists (at least at the lower end of the scale) between expenditure on housing and its quality. Since expenditure on housing forms a large part of total non-food expenditure, it was not thought useful to include any such estimates in the calculation of the poverty line. This has therefore been calculated solely on the basis of food consumption.

The method involved was to estimate the minimum necessary daily food requirements to maintain the health and activity of an average male adult. The resulting basket of goods was then expressed in 1975 prices using price estimates for 1974 made by Carmela d'Apice, adjusting them by the retail price index. An alternative source of price statistics (although not really sufficiently comprehensive in terms of its coverage of types of foodstuffs), is to be found in the "Annuario Statistico" (1977). These are calculated over time for each of the fifty-one provinces and therefore give some idea of the regional variations in price levels. A comparison of the two sets of data leads us to make two observations.

Firstly, although prices are generally slightly lower in the southern provinces, for foodstuffs of major importance such as meat, milk, cheese and pasta, the difference, if any, is negligible.\* Secondly, the poverty line calculated with these figures would appear to be up to 14% higher than we have estimated, although this is not surprising given that the coverage of foodstuffs does not necessarily correspond to the types of goods purchased by low-income households.

---

\*There are also some striking cases where prices for some goods were actually higher in some southern provinces than in the northern centres. Tomatoes for example were more expensive in Potenza than in Turin.

The estimated monthly minimum food expenditure level derived from the previously mentioned survey is found to be Lit. 31,500. Again we must emphasize that this is a minimum figure which may be increased from 10% to 30% in the case of a person undertaking heavy or intensive work. To convert this figure into a family estimate, various coefficients must be used - .8 for women and for men over 59 and between .2 and .8 for children under 14 years. The estimates of the poverty line for various household sizes (see table 2) were thus made using the following assumptions as to household composition:

1 person	- 1 adult male (coeff. 1)
2 persons	- 1 adult male + 1 adult female (coeff. 1.8)
3 persons	- 1 adult male + 1 adult female + 1 child (coeff. 1.8 + .6)
4-5 persons	- 1 adult male + 1 adult female + 2.4 children (coeff. 1.8 + 1.44)
6+ persons	- 1 adult male + 1 adult female + 4.8 children (coeff. 1.8 + 2.88)

The coefficient used for children assumes an average age of around 6 years. We have not assumed that there may be more than two adults (over 14 years) living in the house, although for large families this may often be the case. On the other hand it seems probable that poorer families would have fewer such dependants than richer ones - not only because they are less able to provide such assistance, but also because in the case where several members of the household are working the household as a whole is less likely to be in the poorest group. Our coefficients would therefore seem reasonably accurate for the poorest households which we are considering - it should however be borne in mind that there may be a number of individual households (especially in the larger size groups) where the coefficients, and therefore the poverty line, should be a little higher.

To examine the actual consumption pattern of households as opposed to the "optimum" nutritional basket of goods we used to estimate the poverty line, we compared the actual with the estimated basket for a 2-person household at the margin (i.e. Lit. 56,640 per month). The results are as follows:

<u>Product</u>	<u>Actual Expenditure</u>	<u>Estimated Expenditure</u>
Bread, pasta		
rice	9,000	9,650
Meat & fish	18,600	11,950
Butter/oil	4,000	3,670
Milk, cheese	-	
eggs	8,450	9,270
Vegetables/ fruit	7,300	13,400
Coffee, wine	9,280	8,700

The actual and expected figures are fairly close in four cases out of six; the exceptions being that consumption of meat and fish is somewhat higher than one would expect, and that of vegetables and fruit somewhat lower. In practice one could find several explanations for this - if we have estimated the relative prices correctly the difference must be explained by personal tastes, on the other hand, if these have not been correctly estimated, this could equally provide an explanation. Say for example, the price of meat/fish has been underestimated\* - this could result in higher expenditure on meat/fish (in fact, the price elasticity for these is normally less than unity) at the expense of other foodstuffs. The outcome is probably partly explained by both prices and tastes, but it does raise the important question that even if a family is spending slightly over the poverty line, it may not be optimising its intake of calories, proteins and vitamins and that in terms of nutritional value, it may well be below such a line.

---

\*It should be remembered that the prices used were minimum prices in that they referred to the most commonly consumed or basic types of foodstuff and that the ISTAT prices - especially of meat, were somewhat higher.

Table 2a outlines the basic figures and assumptions on which our calculations were based. Figures are also given for a 20% variation on either side of the poverty line (see tables 2c and 2d).

Table 2b gives the distribution of households estimated to be below the poverty line in 1975. The poverty line, it should be recalled was estimated solely on the basis of food consumption, which also formed the basis for the poverty estimates themselves.

From table 2b we see that the incidence of poverty is highest in the largest and smallest household sizes with respectively 16.1% and 9.1% of households in these categories, in poverty. In terms of the numbers of persons in poverty, 74.5% of those in poverty belong to households of four persons or more. Given our assumptions on household composition we may deduce that around 50% of those in poverty are children. Undoubtedly one of the main reasons for this is the low level of family supplements - a point we shall discuss in the comparative analysis in the next section (see annex).

Another category which has a relatively high incidence of poverty is the elderly. Given figures by Beckerman on the distribution of elderly people in the poor population (Beckerman 1978 p. 13), and relating them to our own figures in table 2b, we may estimate that 15.4% of those in poverty are over 65. This compares with their share of 12% in the total population.

The absolute numbers of those below the poverty line are quite startling-around 4 1/2 million persons in poverty in very much the narrow sense of the word. But as we shall see in the surveys on other countries, to be poor is not only to have little to eat, it often entails a combination of social inferiorities such as poor housing, education and narrower employment opportunities. It is not by chance that the dependent agricultural workers in Italy who, on average, have the lowest levels of consumption, are also the category for which one finds the highest incidence of illiteracy (31.2%) and the highest levels of housing overcrowding.

TABLE 2 a.

ESTIMATED POVERTY LINES (FOOD ONLY) 1975

<u>Household size</u>	<u>Adult Equivalent Units</u>	<u>Poverty line Lire per month</u>	<u>Poverty line + or - 20%</u>
1 person	1	31,460	37,750 25,170
2 persons	1.8	56,640	67,970 45,310
3 persons	2.4	75,500	90,600 60,400
4/5 pers.	3.24	102,000	122,400 81,600
6+ pers.	4.68	147,300	176,760 117,840

TABLE 2 b.

HOUSEHOLDS BELOW THE POVERTY LINE IN 1975

<u>Household size</u>	<u>Number of households below the poverty line '000s.</u>	<u>% of house- holds in group in poverty.</u>	<u>Number of persons in poverty. '000s.</u>	<u>Poverty profile.</u>
1 person	193.3	9.1	193.3	4.3
2 per.	282.1	7.8	564.2	12.5
3 pers.	130.8	3.54	392.4	8.7
4/5 pers.	367.4	6.75	1,616.6	36.0
6 + pers.	254.2	16.1	1,728.6	38.5

TOTAL = 4,495.1\* 100.0

\* = 8.05% of total population.

TABLE 2 c.

HOUSEHOLDS BELOW THE POVERTY LINE - 20% IN 1975.

<u>Household size</u>	<u>No.households below pov.line '000s</u>	<u>% of hshlds. in group in poverty</u>	<u>No.of per- sons in poverty</u>	<u>Poverty profile</u>
1 per.	95.58	4.5	95.58	5.7
2 pers.	115.74	3.2	231.48	13.9
3 pers.	40.64	1.1	121.93	7.3
4/5 ..	103.42	1.9	455.05	27.3
6 + ..	112.11	7.1	762.35	45.7
<hr/>				
TOTAL = 1,666.4				100.0
= 2.98% of population				

TABLE 2 d.

HOUSEHOLDS BELOW THE POVERTY LINE + 20% IN 1975.

<u>Household size</u>	<u>No.households below pov.line '000s</u>	<u>% of hshlds. in group in poverty</u>	<u>No.of per- sons in poverty</u>	<u>Poverty profile</u>
1 per.	365.33	17.2	365.3	3.8
2 pers.	585.95	16.2	1,171.9	12.3
3 pers.	321.46	8.7	964.4	10.1
4/5 ..	849.11	15.6	3,736.1	39.1
6 + ..	487.91	30.9	3,317.8	34.7
<hr/>				
TOTAL = 9,555.5				100.0
= 17.1% of population				

Finally, tables 2c and 2d give, respectively, the estimated numbers of persons consuming less than 20% below the poverty line. Comparing all three tables it is clear that:

- (a) the distribution of those in poverty (poverty profile) varies little from one table to another, except that the position of the smallest and largest household sizes becomes more unfavourable as one moves from table 2d to 2c - a greater proportion of these households are well below the poverty line;
- (b) the number of persons in poverty is very sensitive to one's choice of poverty line - the range is from 3% of the population at 20% below, to 17.1% at 20% above, our estimated line. From our earlier remarks, it should be fairly clear that the poverty line represents a truly minimum subsistence level diet. The hardship imposed on those consuming less than 20% below this level, must indeed be great. In this context it can be seen that a level of consumption 20% above our poverty line in no way gives cause for complacency;
- (c) the incidence of poverty within each household size group remains highest for the largest family size group ranging from 7% to 31%. Next comes the 1 person size group with between 4.5% and 17.2% of households below the + 20% consumption lines. Referring back to Beckerman's study, we find that around 95% of these one person households are likely to be composed of persons over 60 years (75.6% are probably over 65 years). Certainly, as we go down towards the poverty line -20% we find an increasingly disproportionate share of children and elderly persons in poverty.

#### Estimation of the poverty gap

The previous section has been concerned mainly with giving a "head-count" measure of poverty. Tables 2c and 2d have enabled us to make some comments about the depth of poverty and its distribution between household size groups, and young and old age groups within the population. In tables 3a and 3b we give figures on the poverty gap. This

TABLE 3a

THE POVERTY GAP (FOOD CONSUMPTION ONLY) IN 1975

<u>HOUSEHOLD SIZE</u>	<u>TOTAL POVERTY GAP - MILLION LIRE PER YEAR</u>	<u>POVERTY GAP PROFILE</u>	<u>POVERTY GAP PER A.E.U. (LIRE)</u>
1 person	15,360	6.6	79,462
2 .....	39,408	17.0	77,605
3 .....	18,684	8.0	59,522
4/5 ...	62,628	27.0	52,611
6+ ....	96,420	41.5	81,048
TOTAL =	232,500	100.0	

TABLE 3b

AVERAGE POVERTY GAP PER ADULT EQUIVALENT UNIT PER MONTH

<u>HOUSEHOLD SIZE</u>	<u>AVERAGE GAP PER A.E.U. (LIRE)</u>	<u>POV. GAP AS % OF POV. LINE</u>
1 person	6,622	21.0
2 .....	6,467	20.6
3 .....	4,960	15.8
4/5 ...	4,384	13.9
6+ ....	6,754	21.5



is defined, for any individual household, as the difference between the income/consumption of that household and the corresponding income/consumption poverty line. In practice, one must consider both types of poverty measures. One obvious reason for this is that, for example, an income transfer to someone below the poverty line would clearly reduce the poverty-gap measure although the "head-count" measure of poverty would not necessarily be affected. This is especially important when making international comparisons. According to Beckerman's estimates, for example, the proportion of households below the poverty line in Italy is similar to that in Belgium, Britain and Norway\*, whilst at the same time, the poverty gap in Italy would appear to be proportionately twice as large. Hence the poor in Italy "are about twice as poor, relative to their compatriots, than the poor in the other countries".

Table 3a gives the total poverty gap and the poverty-gap per A.E.U. From the poverty-gap profile we see that 41.5% of the total poverty-gap is accounted for by households of more than 6 persons. This particular measure is important in that it gives a good guide as to necessary expenditure by central administration for the purpose of eliminating the gap. If we assume perfect functioning of the social security system then, for example, 15,360 million lire is theoretically the amount which would have to be handed out in transfers to 1 person households to raise all persons in this category above the poverty line.\*\*

---

\*Note: All these studies use the relative poverty concept the results of which are not directly comparable with the present author's estimates.

\*\* This reasoning is admittedly, somewhat simplistic. A better approach is to calculate, say, the total poverty gap for elderly persons and relate this to the required expenditure on pensions/income supplement.

The poverty gap per A.E.U. is found to be highest in the 6+ category - it is of similar proportions in the two smallest size categories. With regard to the 1 & 2 person households it should be remembered that 95% and 83.5% of household heads in poverty in these groups are over 60 years. The depth of poverty is therefore greatest where children and the elderly are concerned.

Table 3b in addition, gives the average poverty-gap as a share of the poverty line. The average gap is around 19% of the poverty line. Given that our estimated line is already very severe, such a shortfall must clearly be a cause of great hardship. Indeed, if we look back to table 2c we find that well over 1 1/2 million persons are still below this level. The last column in table 3b gives a good idea of the average depth of poverty for each household size group.

#### The regional and occupational distribution of poverty

Tables 4a, b and c give details of estimated average consumption per A.E.U., by household size, region and employment sector. For purposes of comparison it should be recalled that the poverty line in terms of total consumption is equal to Lire 56,200 per A.E.U. per month.

From table 4a it is clear that southern consumption levels are well below the national average for all sizes. In particular consumption in the 1, 2 and 6+ categories in the Mezzogiorno is lowest relative to the North, where it is less than 69% of the Northern figure. Average consumpt-

HOUSEHOLD CONSUMPTION BY REGION AND HOUSEHOLD SIZE IN 1975  
THOUSAND LIRE PER ADULT EQUIVALENT UNIT PER MONTH

<u>REGION:</u>	<u>Household size</u>					<u>TABLE 4a</u>
	<u>1per</u>	<u>2per</u>	<u>3per</u>	<u>4/5per</u>	<u>6+per</u>	
ITALY	169.2	159.7	165.1	138.5	103.7	
NORTH-OCC.	178.4	183.0	181.5	153.7	123.4	
NORTH-OR.	189.9	165.6	174.0	152.0	125.5	
CENTRE	200.4	172.9	172.6	144.2	116.7	
MEZZOGIO- RNO	124.9	118.6	131.1	116.5	87.0	

HOUSEHOLD CONSUMPTION BY EMPLOYMENT SECTOR AND HOUSEHOLD  
SIZE IN 1975 THOUSAND LIRE PER A.E.U. PER MONTH

<u>SECTOR:</u>	<u>Household size</u>					<u>TABLE 4b</u>
	<u>1per</u>	<u>2per</u>	<u>3per</u>	<u>4/5per</u>	<u>6+per</u>	
INDEP.NON-AG.	344.0	213.2	199.0	165.3	133.4	
DEP.NON-AG.	258.7	211.0	172.9	138.8	96.9	
INDEP. AG.	165.0	125.8	139.8	119.5	110.3	
DEP. AG.	138.3	116.4	119.3	97.2	78.3	
NON-ACTIVE	134.8	127.6	140.9	128.3	112.5	

HOUSEHOLD CONSUMPTION PER A.E.U. BY EMPLOYMENT  
SECTOR AND REGION(THOUSAND LIRE PER MONTH)

<u>REGION:</u>	<u>Employment sector</u>				<u>TABLE 4c</u>
	<u>INDEP.</u> <u>NON-AG.</u>	<u>DEP.</u> <u>NON-AG.</u>	<u>INDEP.</u> <u>AGRICULTURE</u>	<u>DEP.</u>	
ITALY	174.2	148.3	120.4	96.7	125.9
NORTH-OCC.	199.2	167.7	151.6	130.6	140.9
NORTH-OR.	194.5	160.1	128.3	140.7	134.9
CENTRE	177.4	158.0	110.6	113.3	136.5
MEZZOGIORNO	142.0	115.0	105.4	81.1	101.2

ion levels are by far lowest in the 6+ category, especially in the Mezzogiorno where the average level is only 50% above the poverty line.

Turning to table 4b we find that the agricultural and non-active sectors are generally well below the non-agricultural sector. In particular the lowest consumption levels are almost all to be found in the dep.ag. sector, where for the largest size group, average consumption is only 39% above the poverty line. It should be noted that average consumption falls off faster for the dependent than for the independent agricultural sector. This suggests the existence of a strong positive relationship between total farm income and farm-household size (see also Irish survey) in the indep.ag. sector. Such a relationship is much less evident in the non-agricultural sector, certainly when one compares the largest and smallest household sizes. One should however note that for the last three categories consumption per A.E.U. is higher for 3 person than for 2 person households, suggesting a rather large increase in total household income between these size groups. Finally, we must note the rather large fall in consumption for 6+ households in the dep.non ag. category, where it is clear that the pressure of dependency is not compensated by a corresponding increase in total income.

Table 4c gives average consumption by region for each of the employment sectors. The Mezzogiorno has the lowest levels of consumption for all categories. Consumption in the dep.ag. sector in the Mezzogiorno is by far the lowest being some 23% below that of the indep.ag. sector for this region. Low levels of consumption within the agricultural sector are also to be noted in the centre region. Finally, of particular interest is the non-active sector in the Mezzogiorno (this sector is mainly composed of

retired persons) where we find that average consumption is somewhat lower than even the indep.ag. sector, although this is not the case at the national level.

A last general point is that there is much less variance between consumption levels in the various employment sectors in the North than in the South. This clearly reflects the persisting marginal character of much agricultural labour in the South.

TABLE 5.

ESTIMATED HOUSEHOLD CONSUMPTION (TOTAL) PER A.E.U.

IN THREE EMPLOYMENT SECTORS IN THE MEZZOGIORNO ('000 Lire per month)

<u>SECTORS:</u>	<u>Household size</u>				
	<u>1 per.</u>	<u>2 per.</u>	<u>3 per</u>	<u>4/5 per</u>	<u>6+ per</u>
DEP. AG.	116.0	97.6	100.1	81.5**	65.7 *
INDEP. AG.	144.4	110.1	122.4	104.6	96.6
NON-ACTIVE	108.4	102.6	113.3	103.1	90.4***

Note: the estimated poverty line (total consumption)

(a) = 56,200 Lire per A.E.U. per month.

(b)  $\frac{\text{est. consumption per A.E.U.}}{\text{poverty line per A.E.U.}}$  for: \* = 1.17  
 \*\* = 1.45  
 \*\*\* = 1.61

(c) av.household size : dep.ag. = 4.27  
 indep.ag. = 4.19  
 non-active = 2.45

Table 5 is derived from tables 4b and c. Given the ratio of av. consumption between Italy and the South for the three categories considered (4c), we may adjust the figures in table 4b for these categories to obtain estimates for the Mezzogiorno. Since there is very little difference in av. household size between the South and Italy as a whole for these three categories (max. difference = .12 persons), no adjustments have been made. We may note

that the largest households in the dep.ag. sector are, on average, only 17 percentage points above the poverty line - the incidence of poverty within this group must surely be very high.

#### A comparison of poverty estimates and methods

A discussion of poverty estimates in Italy would not be complete without reference to a study on this subject recently made by W. Beckerman for the I.L.O. Although Beckerman bases his study on the same household survey, the method employed and therefore the results are somewhat different to the present survey. A comparison of both studies is therefore of some interest.

In brief, the I.L.O. survey uses the international standard poverty line, which, for a couple without children is defined as 100% of average personal disposable income. For the purposes of the I.L.O. study this was expressed as 115% of average consumption.

The next stage is to set the poverty line for the different household size categories. The method employed, once the poverty line for the 2 person household mentioned above has been estimated, is to calculate the ratio of food to non-food expenditure for this marginal 2 person household. Say this ratio is  $x:y$ . The poverty line for any other size group will therefore be where one finds the same ratio  $x:y$  for that group.

The reasoning is that since food exp./non-food exp. increases for any group as total expenditure falls, at the income level at which the share of food consumption has risen to that of the 2 person household (i.e.  $x:y$ ), one can say that the household concerned is no longer "poorer" relative to the marginal 2 person household. It will be spending the

same proportion of its income on food and will have a lower expenditure on less essential non-food items relative to other households above the poverty line in the same size group. Below we reproduce a table of the poverty lines derived from the two surveys.

TABLE 6

<u>Household size</u>	<u>Beckerman</u>	<u>lire per month</u> <u>Bull</u>
	Poverty lines based on share of food in total consumption	Poverty line based on min. subsistence diet and given AEUs
1 person	80,000	56,200
2 persons	128,000	101,200
3 persons	154,000	134,900
4/5 persons (av. 4.4)	190,000	182,100
6+ persons (av. 6.8)	255,000	263,000

Beckerman table A2, p. 52.

As a result of the difference in poverty lines, the overall results relating to the head-count and poverty-gap measures of poverty are somewhat different in the two surveys. Mainly this is due to the I.L.O. poverty line being much higher for the 1 and 2 person size groups. In fact the overall difference between the two surveys for these two groups is around 30%.

This results in (a) a higher head-count measure of poverty - 12.5% of the population as against 8.1%; (b) a very different poverty profile - a greater proportion of those in

poverty are from 1, 2 and 3 person households in the I.L.O. survey, whereas the present author finds that over 38% of the poor are in households of over 6 persons (viz. 9.6% I.L.O.); (c) the poverty gap profiles show a similar relation ship to (b) on comparison. (d) The poverty gap per AEU shows similar tendencies in both surveys - it is highest for the 1, 2 and 6+ categories; (e) on average the poor are around 28% below the poverty line in the I.L.O. survey whilst they are approximately 19% below this line on the present author's estimates. This is not surprising given that the latter survey uses a somewhat lower overall poverty line.

One advantage of the I.L.O. method is that it is possible to make some rough estimates of poverty by region and employment category ( see Beckerman, pp. 15-17). The general results are as follows:

- (a) 22.6% of households in the South are poor compared to less than 8% in the Centre-North. Furthermore, two-thirds of the Italian poverty gap can be attributed to the Mezzogiorno. Not only does the South have a higher share of its population in poverty, but the poor there are on average poorer than elsewhere (see below).

TABLE 7

Region	Average poverty gap per poor
N.W.	24,450
N.E.	20,760
Centre	34,930
Mezzogiorno	36,270
<hr/>	
Total	32,170

Beckerman table 5b, p. 20



(b) The employment category with the highest incidence of poverty is that of the dep. ag. households where 32.3% of households are in poverty. This compares with an incidence of 2% for employees outside agriculture. The incidence of poverty is also very high for non-active households (28.2%) - and this group also accounts for 69% of the total poverty gap. We should however mention that the main reason for this group accounts for such a large share of total poverty is due to the comparatively high poverty line set for smaller household sizes, which we discussed earlier. As it happens, this concerns above all the non-active category whose average household size is only 2.4 persons. Since this mainly concerns retired persons it is worthwhile making a few comments about the levels of Italian old age benefits. In 1977, the minimum old age pension (with contributions) was Lit. 86,300 per month. The means tested 'social' pension(non-contributory)<sup>1</sup> was Lit. 53,300. For a single person the former thus falls 21.6% below the I.L.O. poverty line (expressed in 1977 prices) whereas it is only 11.6% above the poverty line implicit in the present survey(again, at 1977 prices). On the other hand, the 'social' pension turns out to be 51.6% below the I.L.O. poverty line and 31.1% below our own estimates. Furthermore, it is also worth noting that the dependents allowance of Lit.9,880 per month is clearly of only token value.

Certainly, the low level of pensions over the period in question must have been a significant contributory factor to the high levels of poverty we have previously discussed.

---

<sup>1</sup> In 1975 840,000 persons received this social pension.

To conclude this section, we may emphasize the main points of agreement in the two surveys.

(i) Poverty in Italy is mainly concentrated in the South.

In terms of the poverty-gap the depth of poverty reaches very high proportions (over twice that found for other European countries by similar studies);

(ii) The incidence of poverty is highest for dep.ag. households. Apart from the non-active category, poverty is mainly an agricultural and especially a Southern agricultural phenomenon. Even in the non-active sector, as Beckerman points out, many of the poor are likely to have been involved in agriculture during their active working life (and hence receive lower pensions than ex-non-agricultural workers);

(iii) Apart from low incomes, the pressure of large household size is another major factor in explaining Italian poverty;

(iv) In view of the above findings, we have speculated that the low level of welfare benefits, viz. pensions, dependent's allowance, family allowance explains the high levels of poverty observed for several categories. Certainly, without a review and real increase in the levels of these benefits, poverty and in particular, the severe depth of much of Italian poverty is unlikely to recede within the coming years.

#### Some comments on the agricultural sector in the Mezzogiorno

In view of the high incidence of poverty observed in the agricultural sector in the I.L.O. survey, and given the low levels of consumption for this sector, especially in the South (see tables 4 and 5), observed by the present author, it seemed desirable to give some more details regarding, specifically, the Mezzogiorno. Of particular interest is

the regional distribution of farm incomes of the self-employed, and the distribution of dependent agricultural workers within the Mezzogiorno. We should thereby obtain a rough idea of the regional incidence of poverty within this area.

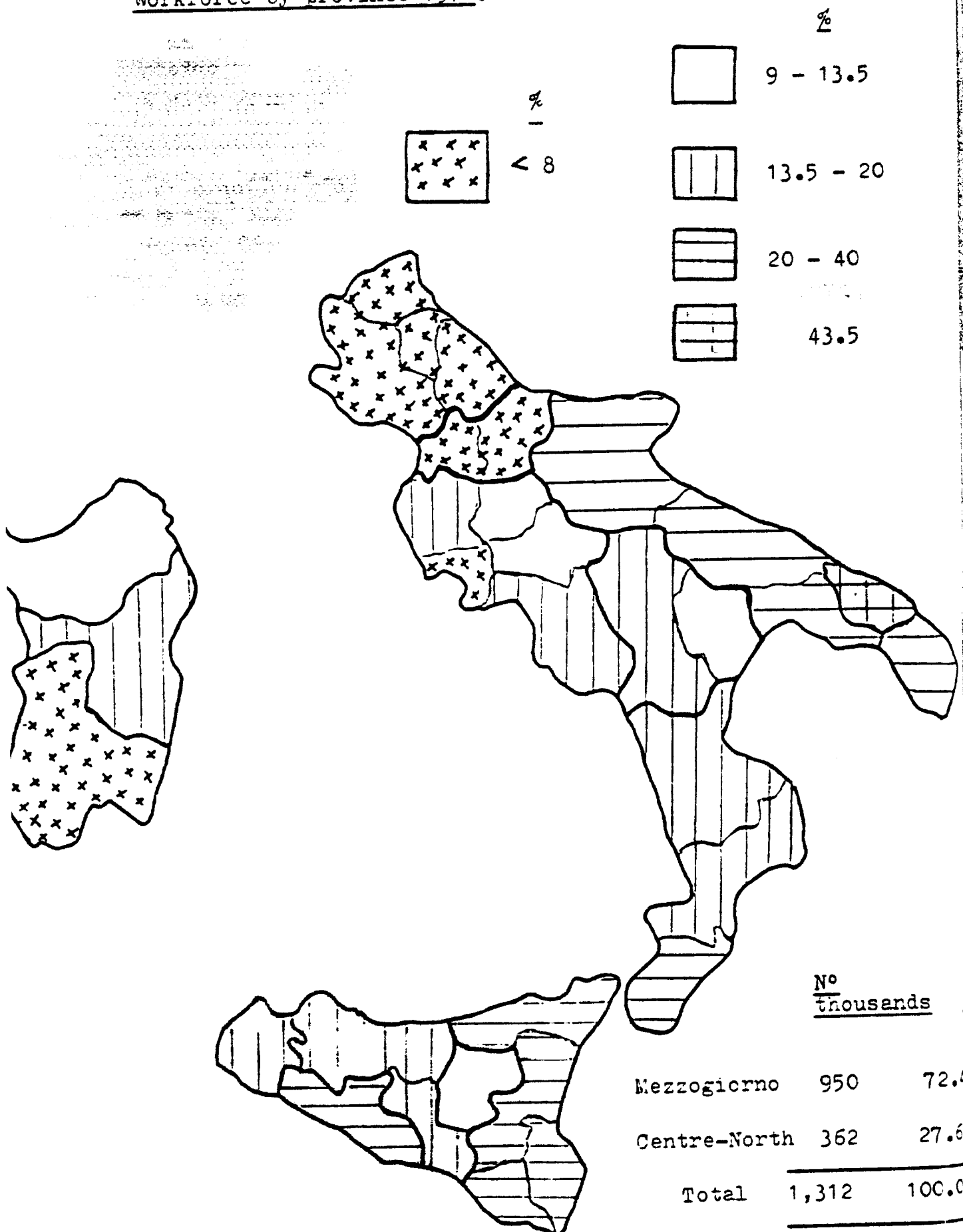
The importance of dependent ag. employment should not be underestimated - in some provinces of the Mezzogiorno over 40% of the employed workforce were found to be in this category. Of 1,312,000 dependent agricultural workers in 1971, 950,000 (72.4%) were employed in the Mezzogiorno - for this region they represented 16.6% of the employed workforce. In map 8, we give the regional distribution of dependent agricultural workers throughout the Mezzogiorno. Since this is by far the poorest employment sector we may assume that the incidence of poverty is probably highest in this group. In view of the substantial regional and provincial variations in the importance of this group\* it was considered that the proportion of dependent agricultural workers in the total employed workforce might give a broad indication of the possible regional incidence of poverty. There are of course many reservations and qualifications to this approach. In particular it might be argued that earnings in industry or commerce may be considerably lower in some regions than in others and that there may be a high incidence of poverty in these sectors for certain regions, especially in the south. In practice, however, at least for the secondary sector, we know that regional variations in hourly earnings in many industries have, over the last few years; narrowed considerably.<sup>1</sup>

Another objection is that the independent agricultural sector should also be taken into account, as this sector also has a very low average consumption level in the Mezzogiorno (see table 4 (c)). If one turns back to table 5 it will, however, be clear that the decline in average consumption as family size increases is much less in the independent agricultural sector than for dep.ag. workers - this is undoubt-

\* In the Mezzogiorno the proportion of dependent agricultural workers in the total employed population varied between 43.5% (Brindisi) and 2.3% (Chieti). In the Centre-North this proportion varied between 6.7% (Emilia-Romagna) and 1% (Piemonte).

<sup>1</sup> Eurostat - "Hourly Earnings" IX 1977.

Dependent agricultural workers as % of total employed workforce by province 1971.



source: Population census 1971

edly due to the fact that larger households in agriculture are more likely to have two or more, working members\*. The possibility of making use of family labour on the family farm (which does not of course exist for dep. ag. workers) may, by increasing the total farm output, enable many farm households which would otherwise be on the poverty line to consume somewhat above it. On the other hand it must be emphasized that, as in the case of France and Ireland we are likely to find substantial regional variations in farm incomes\*\*, reflected in a varying regional incidence of poverty within this sector.

Hence, although, according to map 8 , the proportions of dep. ag. workers is highest in parts of Sicily, Puglia and Reggio Calabria, we should bear in mind two things. Firstly, the share of agricultural employment in total employment is highest in Molise (39.1%) and Basilicata (35.8%)<sup>1</sup> although the former has a very low proportion of dep. ag. workers and the latter only an average share. Being at the same time the two poorest farming regions in Italy it is reasonable to assume that the incidence of poverty in these regions may be unduly high.

\*For households of 5+ persons, only 25% in the primary sector have only one breadwinner compared with nearly 50% elsewhere.

\*\*Gross value added per agricultural worker was lowest in Molise, Basilicata and Puglia - expressed as a percentage of the national average the respective figures were 42%, 52% and 71% (1977).

<sup>1</sup>1975, EEC data

The second point to bear in mind concerns the ratio of dependent to independent agricultural workers. The main reason we find such a large share of dep. ag. workers in Puglia ( map 8 ) is because the agricultural system is biased towards this type of employment - there are four times as many dep. ag. workers as there are independants<sup>1</sup>. In both Calabria and Sicily we find two and a half times as many. Sardinia, Basicilicata and Campania have roughly equal proportions. Abruzzi and Molise, on the other hand, have roughly six and four times as many independent as dependent agricultural workers, respectively. In a sense this implies that the employment structure in some regions is more biased towards a relatively higher incidence of poverty than in others (exceptions, as we have noted being Molise and Basilicata).

In map 9 and table 10 we give the most recent estimates of income per person by province. Before going on to look at trends in income by province it is interesting to make a comparison between maps 4 and 5. Although it is of course possible to attempt finer comparisons, we shall merely point out several provinces with high dep. ag. employment ratios and low personal incomes. In these provinces we may expect the problem of poverty to be particularly pronounced. In ascending order we have Agrigento, Lecce, Reggio Calabria, Cosenza, Catanzaro, Brindisi - we might also mention Isernia and Potenza. Comparing income per person in 1964 and 1974 one finds that several of the aforementioned provinces have made disappointing progress. In ascending order of per capita income in 1974 the bottom 4 provinces were Avellino,

---

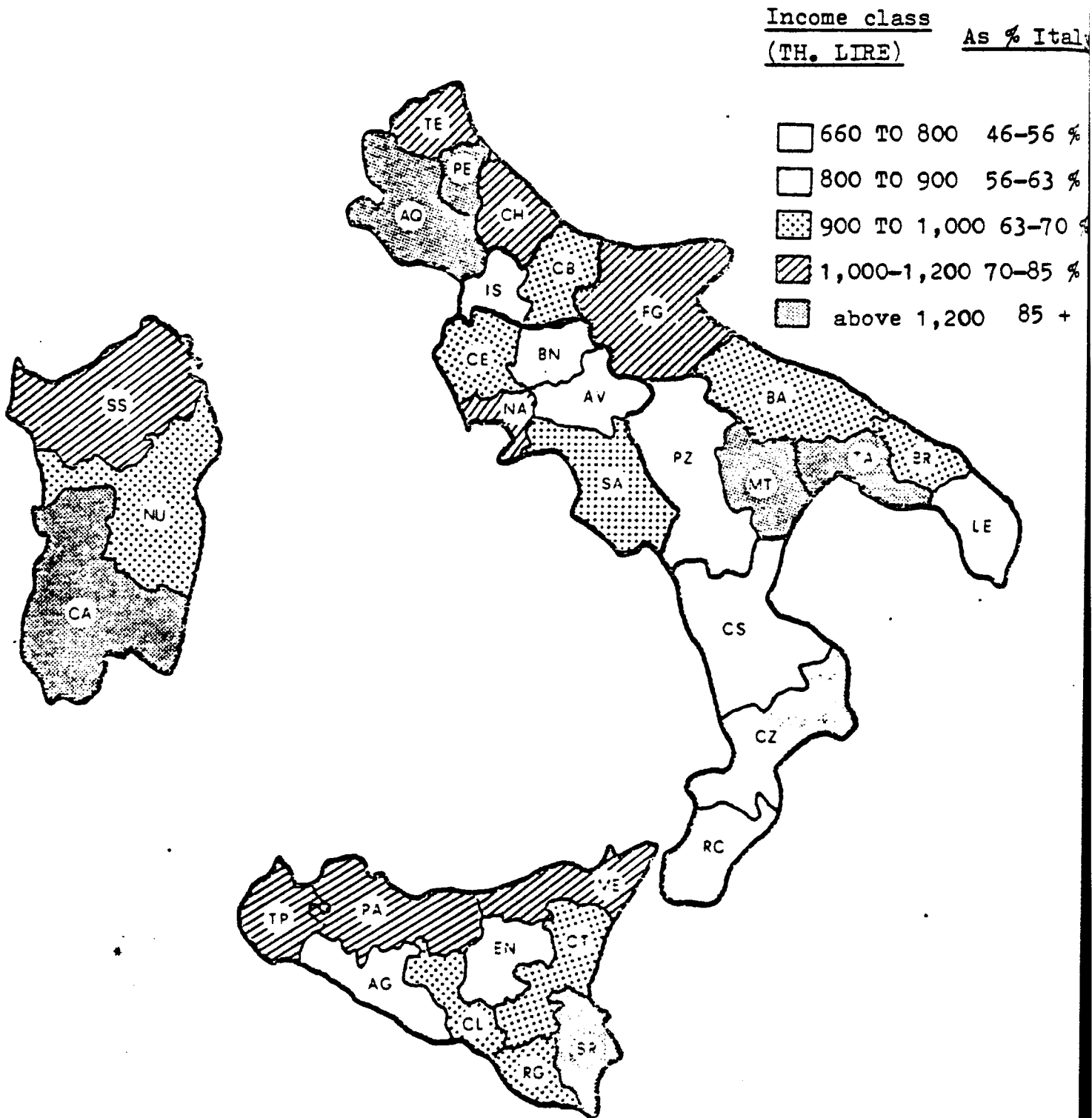
<sup>1</sup>in 1971

Net domestic product at factor cost  
by region and province in S. Italy  
1974

Provinces Million & Regions Lire	Million Lire	Italy = 100
Chieti	428.115	1.185.448
L'Aquila	360.529	1.205.952
Pescara	344.876	1.236.199
Teramo	279.768	1.065.276
<i>Abruzzo</i>	1.413.288	1.176.068
Campobasso	228.308	975.333
Isernia	74.910	794.911
<i>Molise</i>	303.218	923.547
Avellino	284.523	657.120
Benevento	246.140	849.296
Caserta	685.632	966.940
Napoli	2.859.959	1.027.245
Salerno	947.384	960.868
<i>Campania</i>	5.053.638	966.065
Bari	1.362.122	971.870
Brindisi	350.979	921.210
Foggia	695.947	1.035.901
Lecce	564.856	776.270
Taranto	812.263	1.503.203
<i>Puglia</i>	3.786.167	1.017.136
Matera	254.762	1.272.315
Potenza	325.245	790.446
<i>Basilicata</i>	580.007	948.181
Catanzaro	619.952	853.649
Cosenza	535.470	762.296
Reggio Cal.	496.892	844.688
<i>Calabria</i>	1.656.314	819.072
Agrigento	346.164	736.884
Caltanissetta	271.833	940.504
Catania	884.101	910.433
Enna	179.491	882.701
Messina	689.518	1.031.233
Palermo	1.268.390	1.098.489
Ragusa	260.040	984.176
Siracusa	497.047	1.306.200
Trapani	430.563	1.038.552
<i>Sicilia</i>	4.827.347	1.002.355
Cagliari	1.038.687	1.224.272
Nuoro	263.425	966.484
Sassari	465.809	1.123.027
<i>Sardegna</i>	1.767.921	1.151.176
Italia sett.	43.408.700	1.697.116
Italia cent.	16.202.400	1.528.983
Italia mer.	12.792.632	975.237
Italia insul.	6.595.268	1.038.337
Nord-Centro	59.611.100	1.647.864
Sud-Isole	19.387.900	995.824
<i>Italia</i>	78.999.000	1.419.722

SOURCE: G. Tagliacarne - Unione Italiana Camere di Commercio, Editore, Franco Angeli, Milano

INCOME PER PERSON BY PROVINCE ( 1974 )





Agrigento, Cosenza and Lecce. Considering that the Mezzogiorno as a whole gained 5.5 percentage points on the national index between 1964 and 1974, the fact that Avellino gained merely 2.3 percentage points and Lecce actually lost 2.9, gives great cause for worry. As for Agrigento and Cosenza, they gained 6.6 and 6.5 percentage points respectively - just enough to keep pace. Although it should be said that many of the other low income provinces made significant gains over this period the fact remains that the relative position of the poorest provinces was at best stationary.

#### CONCLUSION:

The most significant finding of this survey is that one person in twelve in Italy was underfed in 1975. More than one person in six was only marginally above this level.

Furthermore we have found that the incidence of poverty is highest for children and the old.

Would a national minimum wage or similar legislation be effective in reducing poverty, we may ask. Unfortunately, unless such an increase was very substantial the impact would probably be of only marginal importance (given present levels of unemployment benefit the effect might actually be negative!). A national minimum income brought about by say, a negative income tax system would however create fewer problems in the labour market, but the full cost would of course have to be borne by the State. Given that a substantial part of poverty is probably due to either (i) dependency pressures at large household sizes, or (ii) low incomes of retired persons (and the unemployed), the remedy would thus seem to lie firmly with the Italian social security system.

Where there is only one breadwinner whose income is insufficient to feed, clothe and house a large number of children, the sole determinant of whether the family as a whole sinks to poverty, is the level of state assistance. On 1.7.76 this amounted to Lit. 9,880 per month - less than sufficient merely to feed a three year old child and roughly a third

of that required to feed an eight-year old. At the same date, unemployment benefit amounted to an absurd Lit. 800 per day for up to six months<sup>1</sup> - not sufficient to feed an eight-year old, let alone an adult. Under such circumstances it would appear that those in poverty are more or less left to sort things out themselves.

In the latter half of this paper we gave evidence to suggest that poverty should also be seen in a regional context. In several Southern provinces with low average incomes we found high levels of dependent agricultural workers in the total workforce - the employment sector in which we may assume the risk of poverty is highest. In other such provinces, although this share was much lower, the share of indep. ag. workers was much higher and the agricultural sector as a whole was relatively depressed (the mountain farming provinces of Isernia and Potenza).

How may such findings serve to enhance our analysis of regional development policies? Firstly, we have added a new dimension to the analysis of regional imbalance - the regional incidence of poverty. Secondly, and following from this point, we have added another tool with which to assess effectiveness of regional policy - the degree to which such policies reduce or are capable of reducing spatial differences in the incidence of poverty. In the Italian case there are certainly many difficulties involved in such an approach - if one considers for example that in 1971 1 in 4 independent farmers and almost 1 in 3 dependent agricultural workers were effectively illiterate<sup>2</sup>, the full magnitude of the problem of converting subsistence agricultural economies into industrial 'growth poles', becomes somewhat clearer.

---

<sup>1</sup>E.C. - 'Comparative tables of the social security systems in the member states', Bruxelles.

<sup>2</sup> Population Census, 1971.

---

#### BIBLIOGRAPHY

- 1) "I Consumi Delle Famiglie", suppl. Bull. ISTAT, No. 13, 1975.
- 2) C. D'Apice, "La povertà in Italia", Economia e Lavoro, No. 2, 1975.
- 3) "Estimates of poverty in Italy in 1975", W. Beckerman, I.L.O. Working Papers, 1978.

(i)

IRELAND

- Part I          Poverty estimates.
- Part 2          Some comments on the regional  
                    and sectoral aspects of low incomes.
- Conclusion
- Bibliography
- Annexes I,2 & 3



IRELAND: Introduction

The statistical basis for this section is provided by the 1973 Household budget survey of the Republic of Ireland. This is the most recent survey of expenditure available and covers a random representative sample of 7,748 households throughout the country.

It should be clear that the reliability of results obtained by such surveys depends on the accuracy and consistency of the information provided by respondents. In the present case the expenditure estimates were found to be more reliable than those derived for incomes. The income estimates, are in general lower than corresponding national accounts levels indicate. Taking all households, average expenditure exceeded disposable income by some 13%. The extent of this understatement varies with the type and source of income, and this of course makes difficult any comparison of income levels where income sources differ appreciably.

The low income figures reflect the difficulties often encountered in such surveys, of respondents being reluctant to give full details of their personal incomes. Furthermore, whilst the expenditure data was largely based on records kept during the survey period, the income figures were often less firmly based. Own account non-farm income and investments and the earnings of small scale farmers, were all based on retrospective data relating to a twelve month period preceeding the interview.

On the other hand, it should be recognised that a large part of the apparent deficit in the income figures may be due more to conceptual problems rather than actual understatement. By definition, income excluded certain money receipts such as withdrawals from savings, loans or gifts, and indeed it was the case that some households were living on there savings during the survey period.

In spite of the problems outlined above, part (i) of this paper introduces estimates of poverty in Ireland based on gross income figures. The reason for this choice is simply that gross household income is used for classification in the survey. Our estimates are for both urban and rural households and are disaggregated by household size.

Given the size of the survey it is not possible to obtain results for the various planning regions, or even for particular employment categories. In part (ii) therefore, we try to fill in the gaps with some overall observations.

To begin we look at the position of the lowest income groups for each region. We find that low income households are by no means a homogenous group - their composition varies greatly according to the region and family size we are considering. We then turn to consider the question of family size in more detail. In terms of income and consumption we find substantial regional disparities for all family sizes. Old dependency ratios vary somewhat between regions and we consider the effect this may have on the economic well-being of large sized households in particular.

The position of the unemployed is considered next and here too, we find significant variations. In the poorest regions, the unemployed, on average, have very few resources to fall back on.

The problem of low incomes in agriculture is then pursued in some detail. Figures for 1976-77 suggest a widening gap between rich and poor farmers which is leading to large regional imbalances.

To conclude we summarize our findings on a regional basis. There would appear to be a strong connection between the strength of the agricultural sector and the degree of deprivation.

Some maps are included in the annexes for reference, which give income figures by county, and the spatial distribution of urban centres.

Part (i)Poverty estimates

Using the 1973 Household Budget Survey previously described, some reasonably accurate estimates of poverty in Ireland can be obtained. although it is not possible to estimate the regional incidence of poverty, it is possible to calculate directly the results for urban and rural areas.

For reasons which will shortly be explained, we are constrained to content ourselves with a head-count measure of poverty in terms of a gross income poverty line.

The poverty line

Since households were categorised by gross household income , the poverty line was defined in terms of disposable income , the difference between the two being insignificant as, of course, most households in poverty are unlikely to be paying much, if any income tax (see figures in part ii ).

The survey definition of gross income naturally included social security and other state transfer payments, although certain receipts of an irregular and non-recurring nature, such as loans and retirement gratuities were excluded. Home grown garden/farm produce and housing costs paid by outsiders were also included in household income.

The poverty line adopted was 10% above the U.K. supplementary benefit level, applicable from October 1972<sup>1</sup>. It is, in effect the official U.K. poverty line. The question of whether U.K. rates are applicable to Ireland must of course be asked. We should firstly explain the absence of an official Irish poverty line. Although there are a number of small

---

<sup>1</sup> see Social Trends 1973 p. 205. For a discussion on the inadequacy of Irish rates of social assistance in the early 1970's see, V.George and R.Lawson(1980), pp. 131-136. The poverty line in their survey is partly based on the line suggested at the Kilkenny Conference on Poverty in 1971, and the latter turns out to be almost identical to our own estimates of the poverty line(adjusted for prices).

assistance payments, and poverty alleviation programmes, there is no equivalent of the U.K. Supplementary Benefit. Other social security benefits have somewhat different aims and may operate on the tacit assumption that other sources of funds are available, if only savings. Comparing benefit levels in the two countries, one has the impression that since the mid-70's at least, there is very little difference if any, between benefits in comparable income maintenance programmes.<sup>1</sup>

The poverty line we have used is as follows,		*non-contributory old age pension 1972
Married couple	£12.40 per week	(£10.35)
Single person	£7.85 p.w.	(£ 6.20)
Child	£3.00 p.w.	-

The child supplement varies from £1.90 to £5.20pw. The benefit for an 11-12 year old (+10%) is £3, and is the sum we have arbitrarily chosen as the average child payment. For reference a comparison is given in the table above with the minimum non-contributory old-age pension available in 1972.

#### The estimates

The estimates of the numbers below the poverty line were calculated separately for urban and rural areas.<sup>2</sup> Since the procedure was not entirely straightforward, only the main elements will be discussed. A technical appendix is available from the author on application. It is not included here for reasons of space and continuity.

The main figures are obtained from tables which give the distribution of sample households by gross income category and household size. Unfortunately the income categories are rather wide (<£20 pw, £20-40 pw, etc.), and the lower income category therefore requires further disaggregation. This is facilitated by two other tables which give much finer income categories (<£7, £7-10, £10-15 etc.)

<sup>1</sup> See 'Economic activity in Ireland', article by J.W.O'Hagen

<sup>2</sup> See tables 17 & 19 for urban, and tables 26 & 27 for rural areas.

\*The non-contributory pension was payable at age 70, subject to means-test. In addition free travel on public transport was available to all persons over 70, and free electricity was available to some. (OECD working paper 1975).



but for which only average household sizes are given. The task was then to estimate the distribution of households by size within these narrower income categories ( given that the overall number of households in any size category under £20 pw was known). The number of households for any size group below the poverty line could then be found with a good degree of accuracy. The overall poverty-gap could not however be estimated, since the income of households below £7 pw was not known.

The final results are given below :

#### URBAN

household size	% of persons in group in poverty	poverty profile
1 person	34.4	9.3
2 per.	16.3	11.5
3/4 per.	6.5	13.7
5/6 per.	9.2	22.2
7 + per.	17.9	43.4
Overall	12.6	100 %

#### RURAL

household size	% of persons in group in poverty	poverty profile
1 person	39.3	7.1
2 per.	31.8	18.4
3/4 per.	15.6	20.0
5/6 per.	15.1	19.5
7 + per.	20.6	35.0
Overall	19.9	100 %

<u>STATE</u>	household size	% of persons in group in poverty	poverty profile
	1 person	36.6	8.1
	2 per.	23.9	15.2
	3/4 per.	10.2	17.1
	5/6 per.	11.5	20.7
	7 + per.	19.1	38.9
	Overall	15.7	100 %

Clearly the incidence of poverty is much higher in rural areas (19.9% as against 12.6%), although it should be noted that by international standards, the level of poverty in urban areas is still very high. Otherwise the pattern of poverty is fairly similar in both areas, being relatively high for small family sizes, decreasing, and then increasing again for large family sizes.

The incidence of poverty clearly has a much larger variance in urban areas, perhaps reflecting the overall depressed state of the rural economy.

The high incidence of poverty in 1 person hshlds. ( and 2 person hshlds. in rural areas ), is almost certainly due to the high share of retired persons in these categories( 53% of persons in 1 to 2 person hshlds. are over 65 years old ). This share is somewhat higher in rural hshlds. where, overall, 12.6% of the population is over 65 years, as against 7.4(urban).

Furthermore, it would seem that the share of retired persons in poverty ( in the 1 to 2 person groups ), is much higher than 53% , and probably nearer 70%. From the available statistics, we may estimate that around 20.5% of those in poverty are over 65 years( they form 7.4% of the total population), and that around 44% of this group fall below the poverty line.

One might expect that one reason for such high figures could be that a large proportion of this population falls fractionally below the poverty line (due to say, a small shortfall in state pensions). A closer analysis of 2 person hshlds. in poverty reveals, however, that 42% of the urban and 45% of the rural population receive less than £ 7 pw. — the poverty line for this group being £12.40 pw.

Turning to large-sized hshlds. we know that of those in poverty, many are largely dependent on unemployment benefits and childrens allowances (see part ii). Furthermore it is also clear that the depth of poverty is once again very great in many cases. For the 7+ category (poverty line £31.20 pw. ), 17% of the urban and 24% of the rural population receive less than £20 pw.

To conclude this section, we may note a few points of comparison with the Italian survey on poverty. In terms of overall results the Irish figure (15.7%), is comparable with the present authors estimate of 17.1% for Italy\*, or alternatively, the I.L.O. estimate of 12.5%.

---

\* see Italian survey table 2d. This is in fact the Italian poverty line (+20%), which as it transpired, came very close to the Irish suppl. ben. based poverty line (adjusted for prices and exchange rates).

Certainly, there is an interesting similarity between the Irish results for rural areas (19.9%), and the I.L.O. estimate of poverty in southern Italy at 22.6% of all households.

At another level, it is clear that for both countries the depth of poverty can be quite severe. As for the incidence of poverty it is also clear that children and the elderly fare worst in both cases. Although a detailed examination of income maintenance programmes is outside the scope of this paper, we may note that the concept of a minimum income\* is virtually non-existent in both Italy and Ireland. The result is that elderly persons solely dependent on minimim "social pensions," or low income working households with dependents, may consequently fall below the poverty line, and by a considerable extent in many cases. At the risk of repetition, we should add that apart from the positive welfare effects of increasing(or introducing) such benefits, the regional impact would probably be considerable, given that the distribution of poverty is regionally (and rurally) biased in the countries considered.

In part ii of this survey we shall consider the regional aspects of low incomes in more detail. Unfortunately, it is not possible to estimate the regional distribution of poverty, however we are able to determine which regions are likely to have a relatively higher incidence of low-incomes. We are also able to give some idea of the rural/urban imbalance within regions and of the extent of low incomes in the agricultural sector.

It is hoped that the overall analysis will lead to a better understanding of the different causes and types of poverty within Ireland.

---

\* It is of note that no official govt. estimates of poverty exist for Ireland, Italy or France.

Part (ii). Some comments on the regional and sectoral aspects of low incomes.

Table 2 deals with direct incomes, state transfers, direct taxes, average disposable income and average expenditure for each of the eight planning regions in Ireland in 1973. In order to concentrate on the low-income problem we have limited the analysis to households earning less than £40 per week.

Although there are some regional differences in total direct income per household, it can be seen that state transfers have an equalising effect, so that only very small differences in total disposable income remain. This effect is, however, somewhat imaginary since when we take household size into account (ie. disposable income per person), these imbalances reemerge. The introduction of, for example, higher family supplements would help reduce such differences, as would the establishment of a system similar to the U.K.'s supplementary benefit.

Since the poorer regions tend to have larger families and, presumably, a higher proportion of households with very low incomes, social security payments not only have welfare effects, but also important effects on the regional distribution of incomes.

Using statistics from other tables we may add the following notes to table 2. In the under £20 per week category we may note that direct income from self-employment (farming) and own garden/farm produce constitutes over 50% of total direct income in the four last regions. It is lowest (9%) in the Eastern region. In the East, retirement pensions and wages and salaries account for over 50% of average household income. Hence, the sources of direct incomes (low incomes) vary considerably between regions. The composition of low income families may therefore be assumed to vary accordingly.

In the Eastern region a higher proportion of households under £20 per week are composed of wage and salary earners and retired persons whereas in the four last regions it is clear that the proportion of households composed of farmers, part-time or full-time, is relatively higher<sup>1</sup>.

For the category £20-40 per week earned income (wages/salaries) is by far the major component of total direct income except for the Western region where wages/salaries and farm income each represent about 40% of total direct income.

---

<sup>1</sup> see table 9 Household Budget Survey pp. 113-116

TABLE 2  
Average size, direct income, disposable income and disposable income  
per person of households, classified by gross weekly household  
income and planning region (1973).

IRE, av, gross household income = £40.3pw/av, disp. income p.p. = £9pw/av, exp. p.p. = £10.30pw									
	East	South E.	SouthW.	Mid-W.	West	NW & Dongal	Midlands	North E.	
	<20, 20-40	<20, 20-40	<20, 20-40	<20, 20-40	<20, 20-40	<20, 20-40	<20, 20-40	<20, 20-40	
av. size	1.9 3.95	2.0 4.0	1.95 4.0	1.95 4.0	2.2 4.2	2.5 4.7	2.2 4.3	2.0 4.0	
total direct income	4.7 27.2	5.0 25.4	5.4 26.2	4.8 25.4	5.9 23.6	5.0 22.6	6.3 25.8	5.9 25.4	
state transfers	6.4 3.0	6.2 3.6	5.6 3.7	6.1 4.3	5.4 6.0	5.9 6.7	4.3 4.0	4.6 4.5	
Total direct tax	.3 3.1	.3 2.2	.3 2.4	.14 2.0	.12 1.4	.16 1.6	.12 1.5	.13 1.8	
Total disposable income	10.8 27.1	11.0 26.9	10.7 27.5	10.8 27.7	11.2 28.3	10.8 27.7	10.5 28.2	11.35 26.1	
av. disposable income per person (exp.)	5.6 6.9 (8.8)(9.2)	5.5 6.7 (7.5)(6.2)	5.5 6.9 (8.8)(9.2)	5.5 7.0 (7.9)(8.9)	5.1 6.7 (7.6)(8.2)	4.3 5.9 (7.0)(7.3)	4.8 6.6 (8.7)(8.4)	5.7 7.0 (7.4)(8.1)	

Considering the figures for the whole country, of the under £20 per week category, classified by household size<sup>1</sup>, one finds:

- in the 1-2 persons households pensions account for about half of disposable income;
- in the 3-4 person households there is no clear major source of household income;
- in the 5-6 person households unemployment benefits and children's allowances represent about 40% of disposable income;
- in the 7+ persons households these represent about 60% of disposable income.

For the other income groups, wages/salaries are the main component of average disposable income (in all household size categories).

Average consumption per head is found to decrease with family size for the £20 or less category, being £4.04 per week per person in the largest families.

Table 3 gives income and expenditure per person by region and household size. This gives us a much broader picture of regional disparities. Not surprisingly the larger families are, on average, the poorest. Generally, the poorest regions are so for all household categories. Hence, N.W. and Donegal have the poorest families in all family size categories, average consumption per head (7+) being only 31% of that for the smallest households in the Eastern region. Surprisingly, although the East has the highest level of personal income per person, it is clear that this is due to a higher distribution of households in the 1-4 person categories. Larger families in the East are clearly no better off, on average, than elsewhere in the S.E., S.W. or Mid-West.

Whether one compares the poverty lines in table 3c with either expenditure or income, it is clear that, on average several regions are only marginally above the poverty line for some or all size categories. In particular, we may assume that the regional incidence of poverty is likely to be very high in the N.W.&Donegal region for all categories.

---

<sup>1</sup> see table 8 of H.B. survey

TABLE 3

3(a) Disposable income per person by region and household size.

<u>household size(persons)</u>	<u>E.</u>	<u>S.E</u>	<u>S.W</u>	<u>MidW.</u>	<u>N.W.&amp; W. Donegal</u>	<u>Midlands</u>	<u>N.E.</u>	
1-2	14.8	13.4*	13.0	12.75	11.1	9.4\$	10.9	12.6
3-4	12.5*	11.6*	11.1	10.5	9.7	7.6	9.24\$	10.9
5-6	8.7*	9.1*	8.76	7.56	7.4	5.9\$	7.1	8.1
7+	6.66	7.2	6.7*	6.44	5.2	4.6\$	5.6	5.8
<u>£ per week</u>								

(Note: rooms per inhabitant

\*Highest \$Lowest )

3(b) Average total expenditure per person by region and household size.

<u>household size.</u>	<u>E.</u>	<u>S.E</u>	<u>S.W</u>	<u>MidW</u>	<u>N.W.&amp; W. Donegal</u>	<u>Midlands</u>	<u>N.E.</u>	
1-2	16.7	12.7	13.4	11.6	11.3	10.3	12.3	10.8
3-4	14.8	11.4	12.2	11.7	11.0	10.6	10.5	11.1
5-6	10.8	9.6	9.6	8.9	8.9	7.6	8.4	9.9
7+	8.1	6.7	8.1	7.9	7.1	5.5	7.3	6.9
£ per week								

3(c) Poverty lines in terms of income per person per week

<u>household size</u>	<u>1-2</u>	<u>3-4</u>	<u>5-6</u>	<u>7+</u>
<u>£ per week</u>	7.0	4.80	4.20	3.80



Larger families not only have the lowest inc./cons. levels, but they are on average more poorly housed. For the 1-2 persons category the regional minimum\* is 2.46 and maximum 2.93. For the 7+ category the figures are .58 and .69 respectively. As shown in table 3, in general , the regions with the highest and lowest levels of disposable income per person have also the highest and lowest figures per rooms per inhabitant within each household size category. The N.W. and Donegal region fares worst in both respects.

Before going on to assess some aspects of the economic situation of the out of work it is worthwhile to make a few comments on family size. Statistics are available in the aforementioned survey\* which enable us to look at incomes and consumption by household composition and gross weekly household income at a national level. In the under £ 20 per week category we find that for households with "two adults and children", average disposable income per person is £ 3.05 per week. For "other households with children" the figure is £ 2.54 per week per person (or 28 % of the national average). Although state transfers form over half of disposable income in both categories (54% and 63% respectively), it is clear that such transfers are not capable of pulling up low income households to a satisfactory level.

Regarding family size it was thought instructive to calculate the value of the marginal increase in direct income as household size increased. The method used was to calculate changes in average direct income per household between the 3-4 and 5-6 person categories and between the 5-6 and 7+ categories, and to divide this by the change in the average number of persons in each category. This gives us a rough approximation of the marginal value. The figures for the eight regions are as follows:

Estimates of the marginal change in direct income by household size and region (£ per week)

	E.	S.E.	S.W.	Mid W.	W.	NW&D.	Mid.	N.E.
From categories (3-4) to (5-6)	1.24	3.95	4.25	2.17	4.12	3.45	3.5	2.75
From categories (5-6) to (7+)	1.43	3.41	2.0	4.14	.98	.83	2.02	.92

Although, as expected, in general marginal revenue falls as family size increases, there are two exceptions - the East and the Mid-West.

In many cases one would expect large households to be extended families, with dependants in the form of young children and aged relatives, and other active members contributing to total household direct income. As the age distribution of household heads is fairly similar as between regions for each household size category (apart from the Eastern region), we may assume that these figures reflect to some extent employment possibilities for active family members in agriculture, industry and services. These figures have been included in the text because it was considered that the variations were such that they required an explanation. Considering the (5-6) to (7+) category it seems impossible to assume that for the S.E and Mid W. (and also probably the S.W. and Midlands) the marginal values could be attributed to higher household-head earnings alone. We must therefore assume that such high marginal values are due to contributions from family members other than the household head. This could either be in the form of contributions to household-farm work or from earnings in other sectors. In the cases of the West, N.W. & Donegal and N.E., such contributions either to domestic enterprises or from outside sources are clearly not substantial due to either the poor structure of the former or the unavailability of the latter. In other words, as a footnote to table 3 we may add that there seems to be some evidence to suggest that for larger families there exists a higher ratio of active to non-active (or underemployed) household members in some regions than in others. This would appear to give some explanation for the low figures for large sized families in the West, N.W. & D. and N.E. regions in Table 3. It also suggests that income per person falls off rapidly for the largest households in most regions (i.e. if we could disaggregate the 7+ category further).

The reasoning behind these observations is supported by the fact that the N.W. & D. and West regions have extremely high old dependency ratios of over 14% (national average is 10.8%), whilst the Mid-West region is somewhat below the national average.

Although figures for the East region are given, it is not in-

cluded in the analysis because of the much younger household head age distribution in all household size categories - this implies a younger age distribution within the family, and higher young dependency ratio - in consequence the marginal estimates are somewhat lower than for other regions, especially in the case of the smaller size groups.

One of the themes so far has been to evaluate the magnitude of low incomes and consumption levels in large-sized families and assess the extent of regional variations. It now seems desirable to give some indication of such variations by livelihood status as well.

Not surprisingly, disposable income per person is lower for all household sizes in the category "out of work"<sup>\*</sup>, varying from £ 6.7 per week to £ 3.76 per week for the largest households<sup>1</sup>. It would have been interesting to have had more information about this category, for example, to assess whether the out of work were so for a longer period, on average, in some regions than in others. However, in the absence of such statistics we may still make some assessment of the regional variations within this group by considering average disposable income and expenditure figures. For those out of work, average state transfers per household are roughly the same for all regions; however, average household direct income varies substantially, being under £ 6 per week in the West, Midlands and NW & D. regions, above £ 13 per week in the S.W. and N.E. regions and above £ 16 per week in the Eastern and Mid-W. regions. This seems to suggest wide regional variations in the economic well-being of the unemployed. It would also seem to support our previous remarks relating to the economic capacity of the extended family - clearly in some regions the out of work have a not insignificant direct income to fall back on (probably other members of the household are employed), whilst in others this is not the case. Average disposable income per person of the out of work category is lowest in the N.W & D. region (£ 3.3 per week) and highest in the N.E. region (£ 5.7 per week).

---

<sup>\*</sup>not including retired persons.

<sup>1</sup>Vol 2 Table 15

Tables 4 to 10 give some indication of the rural/urban imbalance and the extent of low incomes in agriculture.

Table 4 is a good overall indicator of regional variations in average household expenditure per person. Some significant rural/urban divergencies appear within certain regions. The Midlands is unique in that rural and especially rural farm expenditure is higher than urban expenditure - the latter being the lowest for all regions (although the Midlands is not amongst the bottom three regions in Table 1). The N.E. region is another case where the rural farm/urban divergence is relatively large with relatively high urban expenditure and relatively low rural and rural farm household expenditure.

For the East and S.W. expenditure is relatively high for all three categories. For the West and NW & D, the opposite is true. The S.E. and Mid-W. are intermediate cases. Statistics on average family size are included for reference. There are some quite surprising variations in average urban/rural family size within each region. One point to note is that if rural farm expenditure per person is lowest in the N.W. & D. and N.E. regions, this is not mainly due to large average family size but, moreover, to lower average rural farm household income.

Finally, one should remark that more recent statistics suggest (see table 8) that the variance in regional rural farm incomes is at present greater than is implied in table 4. We shall discuss this at greater length presently.

Table 5 gives the incidence of low income households as between urban and rural locations. Average gross household income was estimated by the survey to be £ 40.27 per week. Almost 1 in 4 rural households have gross incomes below 37% of this figure. The proportion of low income households is significantly lower in urban locations. Table 7 shows that there would appear to be some correlation between the degree of urbanization (town size) and average earnings, although only towns above 1,500 inhabitants are above the national average in terms of average weekly household expenditure. The figures give some idea of the extent to which the ability of a region to develop a sound urban structure may influence the level of average earnings for that region, the reason clearly being that larger towns generally have a higher percentage of high income occupations.

TABLE 4  
Average household expenditure (in £) per person by region. (£ per week)

	East	South E.	SouthW.	Mid-W.	West	N.W.&Donegal	Midlands	North E.
--	------	----------	---------	--------	------	--------------	----------	----------

11.9	10.16	10.9	9.94	9.9	8.7	8.46	10.7
------	-------	------	------	-----	-----	------	------

Average household expenditure (in £) per person by region (£ per week)

10.5	8.8	9.72	9.2	8.66	7.7	9.23	8.6
------	-----	------	-----	------	-----	------	-----

.....(RURAL FARM HOUSEHOLDS).....

10.14	8.8	9.58	9.2	8.5	7.65	9.87	7.93
-------	-----	------	-----	-----	------	------	------

Average family size by region

Urban

4.1	3.8	3.87	4.15	4.05	4.5	4.35	4.5
-----	-----	------	------	------	-----	------	-----

RURAL

4.1	4.25	4.0	3.8	4.1	3.7	3.7	3.66
-----	------	-----	-----	-----	-----	-----	------

TABLE 5  
Distribution of household incomes

		<u>URBAN</u>	<u>RURAL</u>
<u>House-</u> <u>hold income</u> <u>(GROSS),</u> <u>% distribution.</u>	<u>£10p.w.</u> <u>or less</u>	8.8	14.0
	<u>£15p.w.</u> <u>or less</u>	15.5	24.5
	<u>£20p.w.</u> <u>or less</u>	20.4	32.6

TABLE 6

<u>Average-</u> <u>farmed</u>	<u>% of total N° farms</u>	<u>household av. exp. (£ per</u> <u>av. size per person week)</u>	
30 OR LESS	34.8%	3.48	7.9
30-50	26.3%	3.98	8.47
50-100	25.9%	4.39	9.6
100+	13.0	4.7	10.6
			10.3=IRE.

TABLE 7

Average weekly household expenditure by town size.

Dublin and Dunlaoghaire	£46.34
Other towns over 10,000 inhabitants	£43.47
1,500 to 10,000 inhabitants	£43.1
under 1,500 inhabitants	£39.13
	£41.3=IRE

Source: Tables 2-7  
Household Budget  
Survey 1973.

Table 6 gives average expenditure per person by size of farm. Only for farms of over 100 acres is average expenditure<sup>(p. 7.)</sup> above the national average, although obviously there are wide variations within each size group according to type of production system. Another point to remark upon is the correlation which would appear to exist between farm size and household size, which suggests greater use of family labour as farm size increases.

Tables 8-10 are largely self-explanatory and need little comment. It should be noted that the two poorest agricultural provinces, Connacht and Ulster comprise, essentially, the West, N.W. & D. and N.E. regions which when compared with 1973 expenditure figures for rural farm households in table 4, suggest little change in rank between the regions, but growing regional divergence.

It is clear from tables 8-10 that there is a widening gap between the rich and poor farmers which is leading to large regional imbalances. As the I.A.I. comments, "there is clear evidence that there are two quite different sectors emerging within farming - the one dynamic and prospering, the other static". The explanation for such sweeping changes is that income from the most common farming system (mainly creamery milk production) went up by 47% from 1976-77. This was as a result of a swift adjustment of production to a 35% rise in prices in this sector. In contrast, income from mainly drystock systems, which includes over 25% of all farms, declined in real terms. This is even more serious given the long-standing association between this farming system and low incomes and begs the question of how long low and/or declining incomes and standards of living will be acceptable to the majority in this area of production. Even more serious, however, is the situation of hill sheep and cattle farms (table 9). Not having the same possibilities as the milk producers to intensify production, and in the absence of large price increases it is almost inevitable that they will continue to lose ground. The remark of the I.A.I. that "... it is likely the system will be extinct before the end of the century", is of little comfort in the short/medium term. In this context it is of note that, according to one survey (in 1975) "approximately 55% of farms provided a labour income per labour unit from farming... of less than the

TABLE 8  
IRISH FARM INCOMES: (1977).

% of farms (full-time) earning income per labour unit employed at least as high as outside farming. \*

	<u>%</u>	<u>av.fm.income 1977.</u>	<u>%change 1976-77.</u>
MUNSTER	66.5	£6494	+44
LEINSTER	46.8	£5583	+44
CONTRACT	28.4	£2374	+1
ULSTER	30.7	£2336	-16
IRELAND	48.0	£4742	+31

TABLE 9                      \*N<sup>o</sup> full-time farms 135,000

<u>Principal production systems:</u>	<u>av.farm income in 1977.</u>
Liquid milk	£8797
Creamery	£4930
*****& tillage	£8299
*****& pigs	£6556
Drystock & tillage	£5556
Drystock	£2330
HILL SHEEP & CATTLE	£1590

TABLE 10  
Distribution of farm income on % basis (full-time farms only).

<u>INCOME:</u>	<u>1976</u>	<u>1977</u>
less than £1,000	11.5	11.5
£1,000 to £3,000	41.4	32.1
£3,000+	47.1	56.4

Source: Farm Management Survey  
(Irish Ag.Inst.)

poverty line for a single person.... and less than 20% of farms provided a 'farming' wage above the poverty line for a married couple with three children".<sup>1</sup>

<sup>1</sup> V.George and R.Lawson, 1980,p.140. The 'poverty line' in this context is however somewhat higher in real terms (around 1/3) than that used in the present analysis.



168

A measure of the degree to which structural change is desirable in the agricultural sector is to compare income per labour unit employed in agriculture with that earned outside farming. From table 8 it can be seen that this indicator varies considerably between regions. A point to note is that even in Munster where average farm income is well above the national average for wages/salaries in the non-agricultural sector (£ 3410 in 1977), over a third of the farms earn an income per labour unit below that earned outside farming. This suggests wide disparities in income exist within the agricultural sector, even in regions which may be considered most successful in farming.

Table 10 confirms our observations on disparities in farm incomes. The farms in the middle category are quickly moving up the ladder whilst those at the bottom are staying put and even losing ground in real terms.

A final point which must be discussed relating to farm incomes is the extent of non-agricultural farm income.\* We may note firstly, that, although the incidence of part-time farming in Ireland is relatively low by international standards (only around one in five farmers are part-time), nearly 90% of these farmers are on holdings of under 50 acres<sup>1</sup>. One may therefore estimate that roughly 43% of farmers with holdings below this size have some form of non-agricultural income to augment their farm income. Secondly<sup>2</sup>, although for all farm size groups the average farm income of part-time farmers was found to be less than for full-time farmers, on farms up to 75 acres the non-farm incomes of the farmer, on average, exceeded this income difference. Although part-time farming generally results in a lower net product per acre\*\* for farms below 50 acres, it also results in a considerable increase (100% in some regions) in net product per labour

---

\*note: tables 8-10 do not include part-time farmers.

<sup>1</sup>OECD "Part-time farming" 1978, p. 32.

<sup>2</sup>J. SCULLY, Agriculture in the West of Ireland: a study of the low farm income problem(1971) S.O., Dublin

\*\*mainly because such farms generally use less labour intensive production systems.

unit<sup>1</sup>.

On the whole, part-time farming can be seen as a rational answer to the problem of low farm incomes caused by the under-employment of agricultural labour. Indeed, the low level of income in some agricultural sectors is often mentioned as one of the primary reasons for seeking off-farm employment.

In certain areas where such alternative employment is scarce some income support measures are provided. One such measure is available for small-holdings in the Western regions. The small-holder's means are assessed on a notional income per h land valuation, allowing the farmer to maximize his resource use without being penalized. Such payments are generally short term but often permanent in the case of, for example, elderly farmers who cannot obtain off-farm work. On the one hand such a measure has an obvious appeal in that it provides direct support for low income farmers, as opposed to, say, price support measures which are inefficient for this purpose. On the other, if in certain areas such support becomes widespread it should be considered a sign of failure in rural development. The necessity, then, is to ensure that regional development policies work towards providing alternative employment, if not in manufacturing, at least in tourism, where possible, or craft industries.

°

°

°

By way of a conclusion to this section, table 11 summarizes the main indicators with which we have dealt. A quick glance back at the text will provide more detailed background information in all cases.

Together these indicators give a much more comprehensive picture of the regional variations in the economic well-being of the least

---

<sup>1</sup>OECD, p. 34.

for large-      of low-  
st family      est inco  
sizes           me group

TABLE 11

Regional Income	E.	S.E.	S.W.	Mid-W.	W.	N.W.&D.	MIDLANDS	N.E.
per person 1973	+		+		-	-	-	
Av. disposable income per person						-		
Av. expenditure per person	+		+			-	+	-
Disp.inc.p.p.of 7+ size group		+			-	-		
Rooms per inhabitant in this group			+			-		
Marginal change in direct income		+		+	-	-		-
Direct income of out of work.p.			+	+	-	-	-	
Rural/urban gap <sup>1</sup> in exp. p.p.							-*	-
Rural farm household exp.p.p.	+					-	+	-
Farm income 1977	+	+	+	+	-	-		-

+ = highest rank, where significantly different from median.  
- = lowest .....  
.....

<sup>1</sup> Hence, only -ve ranks.

\* "Perverse" case--where rural exp.> urban exp. (per person)

privileged sectors of society. Essentially, these sectors comprise low income households, large households, households where the household head is out of work, and rural/farm households. For the first four regions in Table 11, we have no -ve signs. Doubtless one of the reasons for this is to be found in the strength of the agricultural sector and the fact that these four regions also had the lowest levels of employment in the primary sector in 1975, whereas the West and N.W. & D. had the highest (49.2 and 37.5% respectively). The West and N.W. & D. are clearly the two most disfavoured regions in all these respects. The case of the Midlands is not so clear cut - presumably because the region itself is probably one of the least homogeneous.

The N.E. is again a region with much diversity, there being a significant rural/urban gap in expenditure. This is mainly due to (i) a poor agricultural sector and (ii) a relatively high concentration of the workforce in industry (33.2% - state = 31.4%).

Taken as a whole, Table 11 tells us two things: firstly, on average the "poorer" region's underprivileged groups are more so than in the "richer" regions. It follows from this that the "poorest" region (N.W. & D.) had the most underprivileged groups. Secondly, there is a strong connection between the strength of the agricultural sector and the degree of deprivation. Poor agricultural regions have the highest levels of deprivation. The link between agriculture and poverty is well known in the context of development economics; later on we shall discuss in depth the implications of this link for regional economic policies.

---

#### Bibliography

"Household Budget Survey" for 1973 S.O. Dublin (Vols. I&2).

"Part-time Farming" OECD 1978

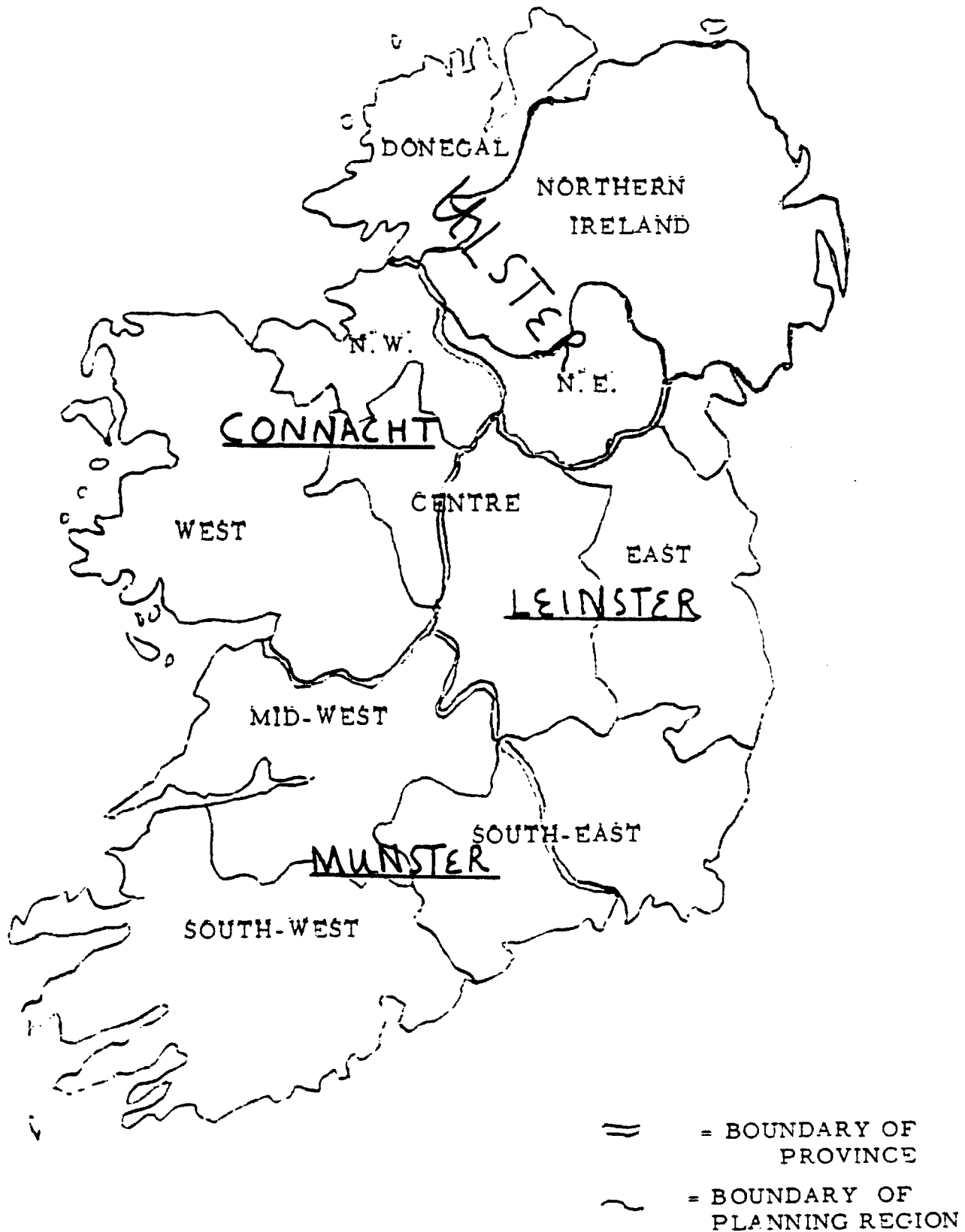
"Farm Management Survey" 1977 Irish Agricultural Inst.

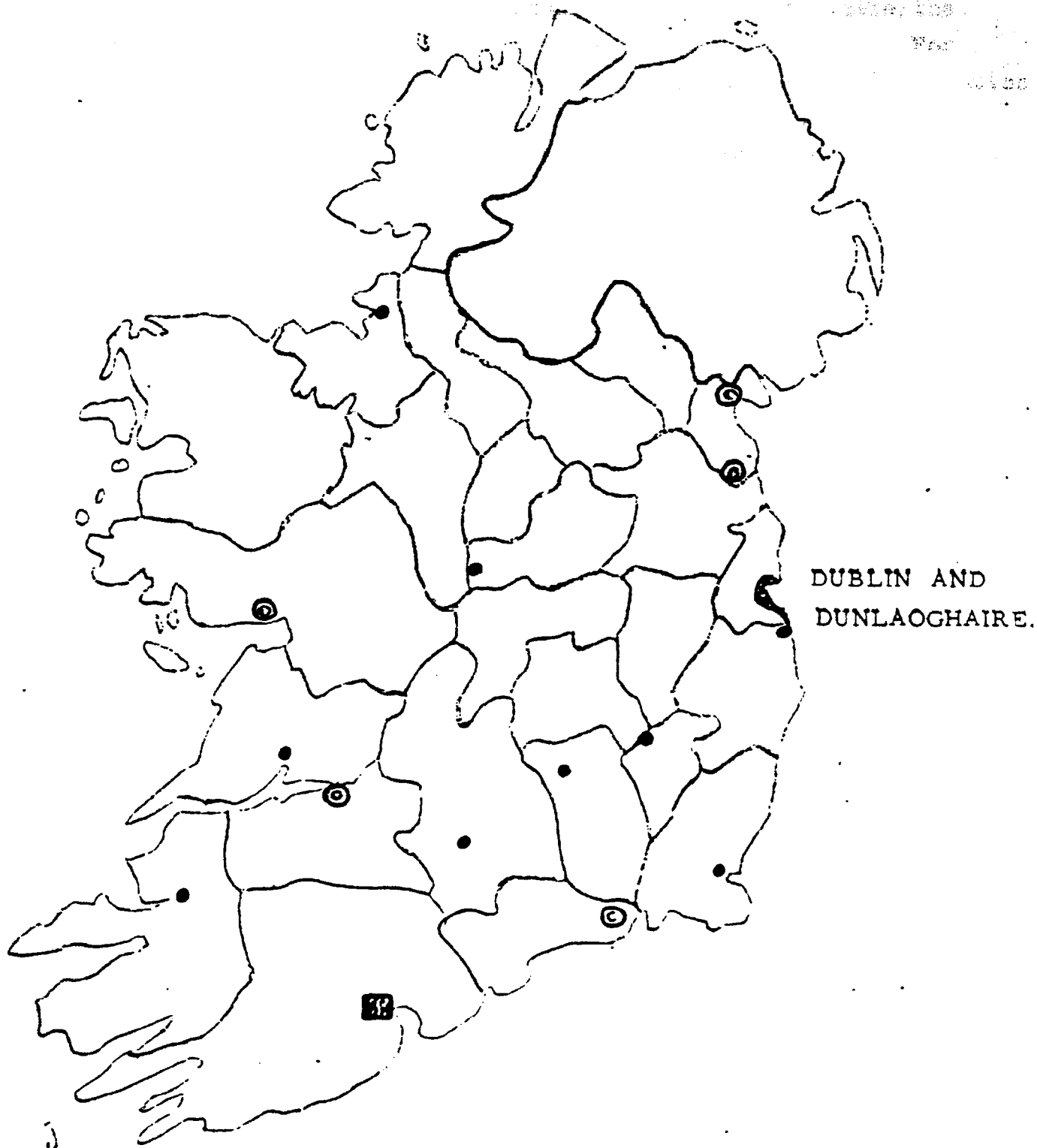
"Agriculture in the West of Ireland" J. Scully 1971 S.O. Dublin.

"Social Trends" 1973 H.M.S.O.

"Poverty and inequality in Common Market countries" V. George and R. Lawson, London, 1980. Chapter on Ireland by S. Ó Cinnéide.

ANNEX 1





COUNTIES AND TOWNS

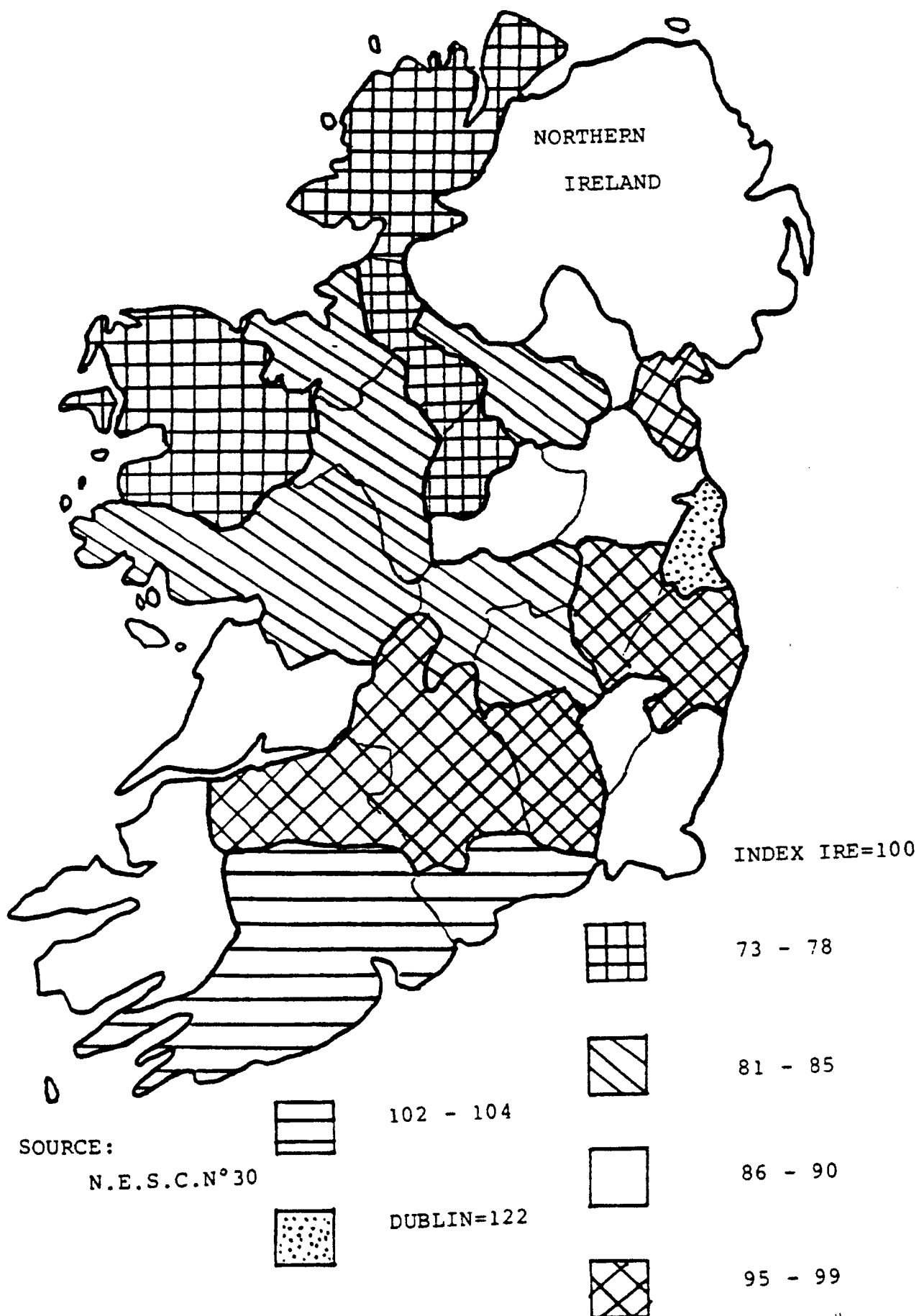
population in 1971

■ TOWNS - OVER 130,000 INHABITANTS

⊙ 20,000 to 63,000 INHABITANTS

• 10,000 to 16,000 INHABITANTS

INCOME PER PERSON BY COUNTY IN 1973.







F R A N C E

Contents:

- Studies on poverty in France	p.107
- Introduction to the present analysis	p.109
- Poverty estimates	p.110
- Sectoral analysis	p.119
- Regional aspects of poverty and low-incomes in France	p.121
- The rural aspect of poverty and low-incomes in France	p.126
- Farm income and the regional distribution of incomes	p.131
- Summary	p.142
- annex, p.143	
CONCLUSION TO POVERTY CHAPTERS	p.145
ANNEX	p. 148



Studies on poverty in France.

Of the many books and studies written on the subject, every one comes to a different conclusion; 15 million poor according to J-P Launay in "La France Sous-Developpée"(1970); one in ten, or around 5 million is the figure quoted by R. Lenoir in "Les Exclus"(1974); according to L. Stoléru the true figure is nearer 10 million (Vaincre la pauvreté dans les pays riches. 1974)

It is difficult to attach much weight to any of the above estimates, especially since the perception of poverty is different for each study. Perhaps the study by Stoléru is the most instructive, as it is essentially a review of many previous works on the subject. However his estimate is ultimately based on a totally subjective estimate of the shares of those "in poverty" within each employment category.<sup>1</sup> His concept of poverty is somewhat general and includes a number of social indicators, the quantification of which is necessarily rather arbitrary.

One important remark of Stoléru is that the annual consumption survey which tries to estimate the real incomes of 11,000 households, only improves our knowledge of average incomes for any category,<sup>2</sup> without allowing any estimates of poverty to be made. Given its size, it is impossible to obtain the type of breakdown found in say, the Italian budget survey of 36,000 households. This is unfortunate since for many categories, especially independent farmers, consumption estimates are probably less biased than income estimates (see also introduction to Irish survey), which are admittedly somewhat low

---

<sup>1</sup> see Stoléru table 21 p. 52

<sup>2</sup> op.cit. p. 47

The C.E.C.D. report, "Public Expenditures on Income Maintenance Programmes" (1976), using a poverty line of 66% of average disposable income, estimated at 16% the level of poverty in France (compared to 3% in W. Germany and 7.5% in the U.K.). According to this study the figures for France were largely due to poverty in the agricultural sector and the retired category (attributable to the low level of the minimum pension). This high level of poverty occurred in spite of a relatively high level of public spending on such programmes (12.4% of G.D.P., which is similar to W. Germany).

A reconciliation of these various estimates of poverty in France is difficult because each starts from a different definition, not all of which are entirely scientific in character.

It is therefore to be hoped that our following study will serve to shed new light on the problem of poverty in France. Finally, in view of the important rural aspect of French poverty, pointed out in a number of previous surveys, it may well prove worthwhile to consider rural poverty in more detail and to assess whether there is any justification for the view that low-incomes in the agricultural sector continue to represent a source of poverty in rural and regional society.

## Introduction to the present analysis.

The method of analysis adopted in this section is somewhat different to the previous section on Ireland. One is always constrained by the statistical sources available, and this in turn necessitates a slightly different approach.

Some preliminary comments should therefore be made on the statistical material available.

In the first place it should be noted that very little information is available on incomes at a sufficiently disaggregated level to enable any straightforward assessment of the distribution of incomes, either within employment categories or by household size.

The most amenable source of information on incomes is probably that based on the "enquete sur les revenus fiscaux des menages", augmented by several other surveys on non-taxable incomes and savings.<sup>1</sup> However, whilst this method enables us to obtain a fairly accurate impression of average disposable income by employment category, it tells us next to nothing about the distribution of income within these categories.

Our approach to assessing income distribution in France, is therefore to take the basic survey results on taxable income - adjusted for household transfers and direct taxation. Whilst there are certainly drawbacks insofar as taxable income is often underreported and no account is taken of non-taxable income (apart from state transfers), these figures, disaggregated by household size, probably represent the closest approximation attainable to the actual distribution of disposable income in 1975. Moreover, on the basis of other surveys which have determined the average extent to which taxable income is underreported (by employment category) and the extent of non-taxable income\*, it is of course possible to adjust the basic survey results to take account of such

1 The survey figures are then adjusted with the use of national accounts statistics to assess transfers and correct for the underreporting of taxable, and non-taxable income. See, INSEE, E&S, No 117, 1979, "Les disparités de revenu entre catégories sociales en 1975".

\* This is in general of lesser importance than the underreporting of taxable income.

factors(table 1). Problems arise however when considering income distribution by employment category since the extent of underreporting of income varies substantially from category to category. In particular, this tendency is more pronounced for farmers and the self-employed than for other employment categories.<sup>1</sup> In these cases, whilst state transfers are taken account of in the survey we have adopted, the underreporting of primary income is not, and, given the fact that(at least for farmers) primary(agricultural) income tends to fall as a proportion of total income as total income diminishes<sup>2</sup>, it is not clear to what extent the figures should be adjusted so as to obtain a true estimate of the number of households below a particular level of income within each of the employment categories. For the analysis of income distribution by employment category we have therefore chosen to provide the survey figures as they stand, and merely indicate the (average) extent to which primary income is underreported for each of the individual categories (table 2).

#### Poverty estimates.

Before turning to these tables we must first of all consider the estimation of an overall poverty line (in terms of disposable income) for France.

Examination of income-maintenance programmes in France, however, provides few guidelines on which to base some appropriate poverty line. Old-age allowances(min.'solidarity'), benefits for the disabled and widows pensions vary from a minimum of Fr 4,300 to 4,700 per annum(1975), and are clearly intended as an income supplement rather than as a minimum level of income in themselves<sup>3</sup> (in contrast for example to Supplementary Benefit in the U.K.). Unemployment benefit(min. means tested) is a more realistic candidate, and this amounted to a figure of around Fr 1,170 per month in 1975(short-term benefit, single person)\*. Another possibility is to take the national minimum wage - the SMIC(salaire min.interprofessionnel de croissance) - and we should perhaps consider this in more detail.

<sup>1</sup> See, "les ressources des ménages par catégorie socio-professionnelle en 1975", INSEE, 1980, p.39.

<sup>2</sup> "les revenus des agriculteurs en 1975", INSEE, E&S(1980)p.30, conversely, the share of pensions tends to rise. The known nature of these changes is not however such as to allow adjustment.

<sup>3</sup> OECD(1976); dependents allowances are considerably lower.

In 1975 , the SMIC was fixed at Fr 7.7 an hour - for a 42 hour week, this amounted to Fr. 16,800 a year or Fr. 1,400 a month. According to the C.E.R.C.<sup>1</sup> around 5% of employees in industry and commerce earned incomes in the immediate vicinity of this level. Some 6.7% earned below this level. Of this 6.7% however, over 47% are estimated to be people paid at the SMIC level but who are absent for part of the year - another 44% are under 18, apprentices or handicapped workers for whom the SMIC applies with certain reductions. The rest are part-time employed or are partly remunerated in kind (eg. free housing). The SMIC by the way, also applies to farm labourers, the salaire minimum agricole being replaced by the SMIC in 1968.

In the present context the main problem in using the SMIC as a poverty line revolves around the question of whether it is to be considered adequate for one or two persons, or indeed more. A further problem is that the SMIC is defined in terms of gross earnings, and we should therefore consider whether net disposable income of families earning the SMIC is substantially different after tax. As Sawyer(1975)<sup>2</sup> has pointed out, disposable income for a two person family with a gross income equal to the SMIC in 1972 turns out to be 92.4% of gross earnings. For a household with two children the effect of addind child allowances raises total household disposable income up to a level approximately equal to gross earnings.

Given the various alternatives to defining the poverty line, a reasonable compromise would be to take disposable income for a two person household where gross earnings are equivalent ot the SMIC.<sup>3</sup> Such an approach can hardly be

---

<sup>1</sup> "Les revenus des francais" CERC, 1977, pp.222-225.

<sup>2</sup> "Poverty in some developed countries", prelim. paper, OECD, Paris, 1975, table 9.

<sup>3</sup> This approach also avoids the problem of assessing dependents allowances, which arises due to the fact that in many countries such allowances are not always designed to meet the full cost of an additional dependent. Moreover in France, their real value has increased significantly over recent years - perhaps indicating that such allowances were considered too low in previous periods.

accused of being too 'lenient' even considering that we are here defining poverty in absolute rather than in relative terms. Hence, the approach is largely equivalent to that used in our previous studies on Ireland and Italy.

As such, the poverty line would represent a minimum disposable income of Fr.1,294 per month for a two person family. On official unit consumption scales (unite de consommation)<sup>1</sup> such a household would represent 1.7 consumer units (or 1.7 Adult Equivalent Units) - hence disposable income at the poverty line would amount to Fr.761 per month per A.E.U., or Fr.8,628 per year.

Certain problems arise when attempting to adjust the income categories in table 1 for general underreporting of income; and whilst the extent of such underreporting is known with a fair degree of accuracy on the average, for particular income categories information is insufficient to adjust individually for each category.<sup>2</sup>

On average however, primary income would appear to be underestimated to an extent of around 20%, and family allowances to an extent of around 10%.<sup>3</sup> Whilst for the lower income families (table 1), net transfers in general account for a higher proportion of total disposable income<sup>4</sup> it cannot be excluded that such households (simply due to their employment composition) may also tend to underreport primary income to a greater extent than on average (see table 2.).

---

<sup>1</sup> See INSEE, Econ. & Stat. N°117, 1979, p.27. The two concepts are identical.

<sup>2</sup> "Données statistiques sur les familles", INSEE, 1981, p.243. Whilst the average degree of underreporting of (taxable) income is known for each employment category, the employment composition of any income category in table 1 is not known with any degree of precision.

<sup>3</sup> Ibid. <sup>4</sup> op.cit. table 102.



However, it seems reasonable to assume that on balance, the result of applying average estimates of the degree of underreporting of incomes will certainly not be far from reality at least for the lower income categories in table 1; Whilst primary income for the lowest income families (below 4,500 fr.) may be slightly underestimated relative to other families, the fact that a larger proportion of disposable income ie. state transfers, is overall underestimated to a lesser extent than primary income, will tend to operate in the opposite direction.

Taking the above considerations into account, the approach adopted to estimate the number of families below the poverty line, has been to adjust the poverty line itself rather than the individual income categories for which adjustment on the basis of average estimates of underreporting would yield results with a greater or lesser degree of accuracy (particularly for higher income categories where net transfers are negative). Adjustment of the poverty line has therefore been carried out on the basis of available statistics relating to average primary income and average transfers for households in the income range Fr 6,500 to 15,000.<sup>1</sup> Adjustment of average disposable income to take account of the factors mentioned above would suggest that the lowest four income categories in table 1 should be multiplied by 1.1846 to obtain actual disposable income in 1975. Alternatively, taking the figures as they stand, the poverty line should be lowered to Ffr. 7,283 per annum per A.E.U. or Fr. 607 per month for purposes of analysis. Table 1a) gives a breakdown of the number of households below this level in 1975. Finally it should be borne in mind that even within the income categories given in table 1 differences may appear between adjusted survey figures and actual incomes due to the fact that transfers can be assumed in general to constitute a higher proportion of disposable income as family size increases.<sup>2</sup>

---

<sup>1</sup> Ibid.      <sup>2</sup> Hence if anything, there may be a tendency to underestimate the number a larger sized families below the poverty line in the following analysis.

TABLE 1.

Distribution of families in France(1975) by  
family type and category of disposable income  
per Adult Equivalent Unit.

En %

Type de famille	Inférieur à 4 500 F	4 500 à 6 500	6 500 à 8 000	8 000 à 10 000	10 000 à 12 000	12 000 à 15 000	15 000 à 20 000	20 000 à 30 000	Supérieur à 30 000 F	Total
Couples sans enfant										
Conjoint actif.....	2,6	1,6	1,7	3,1	3,0	6,5	16,4	34,3	30,8	100,0
Mari âgé de moins de 35 ans.....	1,0	2	1,0	1,6	2,5	4,9	18,0	44,2	26,6	100,0
Mari âgé de 35 ans ou plus.....	3,4	2,3	2,1	3,9	3,2	7,3	15,5	29,3	32,9	100,0
Conjoint inactif.....	3,1	2,4	2,7	17,6	10,3	15,1	18,0	16,5	14,3	100,0
Mari âgé de moins de 35 ans.....	6,1	4,5	2,6	3,9	11,7	26,3	22,9	12,5	9,5	100,0
Mari âgé de 35 ans ou plus.....	2,9	2,3	2,7	18,3	10,2	14,6	17,9	16,6	14,5	100,0
Couples avec enfant										
Conjoint actif.....	1,9	2,3	2,2	4,0	6,1	14,5	24,7	30,6	13,7	100,0
1 enfant.....	1,4	1,3	1,5	2,5	4,2	10,6	24,2	37,0	17,3	100,0
2 enfants.....	1,6	2,0	1,7	4,1	6,3	16,2	27,0	28,5	12,6	100,0
3 enfants et plus.....	3,8	5,7	5,0	8,1	10,8	21,6	21,9	17,1	6,0	100,0
Conjoint inactif.....	3,2	3,8	5,3	12,0	16,6	21,8	16,9	12,2	8,2	100,0
1 enfant.....	4,4	3,4	3,7	9,0	10,7	20,0	18,8	18,2	11,8	100,0
2 enfants.....	3,1	3,1	4,1	9,5	15,2	23,6	19,4	12,9	9,1	100,0
3 enfants.....	2,6	4,1	5,5	11,9	21,5	23,7	15,6	8,9	6,2	100,0
4 enfants et plus.....	2,2	5,2	9,8	22,0	23,4	19,6	10,2	4,7	2,9	100,0
Personnes seules avec enfant.....	4,7	4,9	4,7	8,4	10,7	17,4	24,4	17,9	6,9	100,0
1 enfant.....	4,8	4,0	3,3	6,7	7,5	14,7	28,3	21,6	9,1	100,0
2 enfants et plus.....	4,6	6,1	6,6	10,7	15,3	21,3	19,1	12,5	3,8	100,0
Ensemble..	2,8	2,8	3,3	9,9	10,3	16,1	19,5	21,3	14,0	100,0

Sources : Enquête « Revenus fiscaux des ménages de 1975 ».

Source: INSEE, "Données statistiques sur les familles", op.cit.

Including the estimated proportion of families in income category Fr.6,500-8,000 which fall below the poverty line, we arrive at the figures given in table 1a), which gives the estimated (total number of households and persons below the poverty line in 1975.

TABLE 1a).

Distribution of family units and persons  
below the poverty line - France 1975.

1) Couples with- out children:	% of families in group in poverty	No.of fam.un- its in poverty	No of per- sons in pov. (household)	Poverty profile%
Spouse employed:	5.1	81,059	146,074 (24,067)	4.6
... not employed:	6.9	205,192	354,356 (84,042)	11.8
2) Couples with children:				
spouse empl:	5.35	175,592		
1 child	3.5	55,948	167,844 (14,840)	4.9
of which:				
2 children	4.5	49,289	181,962 (18,990)	5.4
3+ children	12.1	71,184	394,678 (n.av.)	10.6
spouse not empl:	9.8	389,168		
1 child	9.7	112,976	299,730 (52,264)	9.5
of which:				
2 children	8.3	110,506	403,048 (48,721)	12.2
3 children	9.6	75,082	347,616 (33,350)	10.3
4+ children	12.5	86,613	563,850 (n.av.)	15.2
-----				
3) Single parents:	12.05	61,672		
1 child	10.5	31,385	52,269 (15,750)	1.8
2+ children	14.15	30,125	114,870 (n.av.)	3.1
-----				
Single persons & Other (estimate)			394,200	10.6
-----				
TOTAL =	7.3%	1,303,559	3,712,520	=100.0

\* Figures underlined in this column may not correspond to sub-totals due to rounding.

\* Figures in brackets in this column relate to families with adult dependents. For some categories it was not possible to disaggregate the statistics, and dependents have(as in other cases)been included in the total figures. This approach recognises the fact

cont/

Several points should however be borne in mind when assessing table 1a). In the first place, the figures used for the analysis (table 1) relate to family units of two or more persons, and single persons are therefore not included. This unfortunate statistical gap presented a rather substantial problem, especially since the number of such cases is rather high. To obtain a rough estimate of the number of persons in poverty within this group, and in the absence of any other information, it was decided to apply the average incidence of poverty (7.3%) to this category. Whilst this group is likely to be composed of either retired or 'working' persons, it should furthermore be pointed out that a substantial number of family units below the poverty line also contain dependent active or non-active adults at the household level, and these have been included in table 1a). Following from the above discussion it should be made quite clear that the extent of poverty amongst single person households cannot be known with any degree of precision.<sup>1</sup>

A second problem concerns estimation of the poverty-gap. Such estimates have not been possible due to the level of aggregation in the available statistics. This presents a certain difficulty in interpreting the figures in table 1a) since, for example, whilst the incidence of poverty may appear higher for larger household sizes, it may of course be the case that the average poverty-gap for this category is higher

<sup>1</sup> However it is instructive to note that in 1976 around 20% of retired persons (ie. 2.3 million) received the 'minimum vieillesse' means-tested F.N.S. Supplement, which implies that their total income in 1976 did not exceed Fr.13,000 (or Fr.11,500 in 1975 prices). This is to be compared with the 1975 poverty line of Fr.8,600, and certainly a significant proportion of the 2.3m would have been at or below this level.  
C.E.R.C (1977).

cont/

that family units in table 1 may sometimes include other dependents within the household. A further reason for this approach is that family size categories are not sufficiently disaggregated to estimate the number of persons in larger family sizes. Whilst such dependents may of course have additional incomes which are not taken account of in table 1 (and which may have the effect of raising total household income above the poverty line), it should also be remarked upon that a number of households will not have been included in the poverty estimates because, whilst family income may be above the poverty line, total household income, where there are non-earning dependents, may well fall below it. However, the extent of any such bias will not be substantial given that our figures would suggest that the number of adult dependents (excluding spouses) in table 1 comes to around 93,000.

or lower than for the poor overall.

TABLE 1b)

Distribution of persons below the poverty line  
in 1975.

	<u>No. persons in</u> <u>poverty.</u>	<u>Poverty profile</u>
<u>Single persons (approx)</u> -----	394,200	10.6
<u>Couples without</u> <u>children</u> -----	608,539	16.4
<u>Couples with,</u>		
1 child -----	534,678	14.4
2 children -----	652,720	17.6
3+ children -----	1,339,494	36.1
<u>Single parents</u> -----	182,889	4.9
<u>Total =</u>	3,712,520	100.0

Nevertheless account being taken of the aforementioned limitations, a number of important conclusions can be drawn from the above analysis.

In the first place the incidence of poverty would appear to be highest within single parent households where around one in seven with two or more children fall below the poverty line, and for larger families (4+) where the spouse is not employed (one in eight below the poverty line). In general the incidence of poverty would appear to rise fairly abruptly as family size increases after the 3/4 child, and this result is very similar to the findings of our previous surveys on Ireland and Italy. Also, the addition of a second income appears to have a significant influence on the incidence of poverty for each of the family size categories - such that for families with one or two children, the incidence of poverty is around 3-4% compared to 8-10% where the spouse is not employed.

Finally, we should perhaps mention one institutional factor which may have influenced the distribution of poverty by family size. Whilst certain reforms in child benefits were introduced in 1978(see annex), in 1975 the situation was that no benefits were available for the first child, and benefits for the second and subsequent children increased up until the fourth child, decreasing slightly thereafter.<sup>1</sup> This may help to explain why for example, in the category 'couples with children-spouse not employed', the incidence of poverty is actually higher for single child families than for families with two children.

In conclusion it would seem that in part, poverty in France can be ascribed to high levels of dependency(see table 1b.), and in part to insufficiency of earned household income.<sup>2</sup> On first reflection the second point may appear somewhat surprising especially given the existence of minimum-wage legislation in France(which is also the basis for the present poverty line). However, the following points should be noted;

i) The SMIC is set in terms of hourly(gross)earnings rather than some form of monthly or yearly income. A large number of workers earn an annual income at or slightly below the SMIC 'rate', and where there are dependents may thus fall somewhat below the present poverty line.

ii) Independent professions clearly are not affected by the SMIC, and have no minimum guaranteed income.

iii) Concerning retired persons, the minimum(non-contributory) pension amounted to Fr.6,800 per person in 1975 (pov.lineFr.8,600), and was means-tested<sup>2</sup> such that total income of the receiver would not exceed Fr.11,500. It seems reasonable to assume that a certain proportion of the 2.3 million persons who recieved the means-tested supplement in 1975 lived on this income, alone. Hence, if anything, the rough figure given for the number of single persons in poverty is probably an underestimate.

<sup>1</sup> See annex      <sup>2</sup> This pension is divided into two parts - the AVTS which is automatic, and the FNS which is discretionary and means-tested.

## Sectoral analysis

The attempt to obtain estimates of the incidence of poverty by employment category faces difficult and largely unsumountable problems in a number of cases - the major difficulty again being the underreporting of taxable income. By comparing the primary(taxable) income survey figures with national accounts, it is however possible to deduce the average extent of such underreporting for each employment category. Whilst it is possible to adjust overall survey results for this factor (as was the case in table 1), a number of difficulties arise in so doing for the income categories (by sector) given in table 2. In the first place, available estimates on underreporting do not coincide precisely with the employment categories used vis. disposable income. Secondly, whilst the composition of average disposable income is known for each employment category, these shares can hardly be assumed to be reasonably applicable to each of the income categories in table 2. Thirdly, it seems tenuous to assume that underreporting is likely to be of an equivalent extent in all income categories, especially since direct taxation in France is progressive, and as the C.E.R.C. itself points out, "plus le taux d'imposition marginale est élevé...plus la fraude est grande"<sup>1</sup>.

Given the above problems, we have decided in table 2 to present figures on(unadjusted) annual disposable income (per household), together with estimates of the average extent to which primary income is underreported for each employment category. As can be seen from this table, this factor is particularly high for the independent occupations, and especially so for farmers. For the latter category, this fact alone must certainly 'explain' the very large proportion of 'expl. ag.' households below an annual income of Fr.15,000 (per household) in table 2<sup>2</sup>, although as the statistical

<sup>1</sup> Le NouvelObservateur, "L'année économique et sociale 1980", 1981, p.56.

<sup>2</sup> Representing some 313,400 households. Available figures for the other categories(again below Fr.15,000) are; sal.ag.12,900, employés 31,300, inactifs(retired) 473,300.

TABLE 2.

Distribution of families by category of disposable annual income, and by socio-professional category of family head. France 1975. En %

Degree of underreporting, x, / Cat.		Inférieur à 13 000 F	13 000 à 20 000 F	20 000 à 30 000 F	30 000 à 40 000 F	40 000 à 55 000 F	55 000 à 70 000 F	70 000 à 100 000 F	100 000 à 200 000 F	Supérieur à 200 000 F
2.2	Agriculteur exploitant.	34,0	15,2	23,1	13,8	8,0	3,1	1,9	ε	ε
1.06	Salarié agricole .....	6,2	12,2	31,0	24,3	16,7	5,9	3,7	0	0
1.53	Artisan, petit commerçant, patron pêcheur.....	5,7	6,0	16,4	19,4	22,8	12,7	10,1	5,3	1,1
	Industriel, gros commerçant.....	3,8	1,5	4,4	6,6	12,0	8,8	24,1	31,0	7,8
	Profession libérale...	2,5	2,2	6,6	5,0	11,9	12,9	20,1	31,7	7,1
1.07	Cadre supérieur.....	ε	ε	1,2	3,1	11,6	19,0	32,1	28,3	3,5
1.05	Cadre moyen.....	ε	ε	4,4	14,3	32,3	24,7	18,3	4,3	ε
1.05	Employé.....	1,7	2,6	14,6	24,5	31,9	14,5	8,5	1,5	ε
1.04	Ouvrier qualifié.....	1,3	2,7	16,5	30,7	31,9	11,1	5,2	ε	ε
	Ouvrier non qualifié.	3,5	5,4	23,0	28,8	27,7	8,6	2,3	ε	0
1.15	Inactif.....	8,5	24,8	26,1	16,4	12,4	6,0	3,8	1,8	ε
	Ensemble.....	5,3	8,3	16,8	19,9	21,1	12,1	9,2	4,4	ε

NOTE. — ε = pourcentage inférieur à 1 %.

Champ : Familles. Cf. annexe III.  
Source : Enquête « Revenus fiscaux des ménages de 1975 ».

Source<sup>1</sup>: INSEE, "Les ressources des ménages par cat. socioprofessionnelle en 1975" op.cit.  
Source<sup>2</sup>: INSEE, "Données statistiques sur les familles", op.cit.

source itself points out, "...il (est) clair que cela doit correspondre à une certaine réalité dans un nombre appreciable de cas".<sup>3</sup> For this category it is probably better to take a

<sup>3</sup> However the extent of underreporting at the lower end of the income scale should not be exaggerated either - a survey of 647,000 farms by the Inst.National de Recherche Agronomique came to the conclusion that one farmer in four in 1975 disposed of an income below Fr.13,000 (including social security payments). The study also pointed to marked regional disparities, and the most deprived farmers were to be found in Limousin, Auvergne and Midi-Pyrénées. Agra Europe, August 18, 1978.



sectoral approach(using other sources), and we shall turn to consider this matter in more detail shortly.

Nevertheless, bearing in mind the special problem of farm incomes, the figures available from the abovementioned statistical source are usefull in providing a rough guide to the sectoral incidence of low-incomes. Such considerations are quite important as we move on to discuss the regional distribution of low-incomes in France. Taking the number of families below a level of disposable income of Fr.12,000 per AEU per annum<sup>1</sup>, one finds that 15% belong to farm households, 38% to manual and agricultural worker households, and 30% to retired households.

### 3. Regional aspects of poverty and low-incomes in France.

Whilst figures are available at the regional level with respect to average household income, the results are based on the primary income survey mentioned earlier and are not adjusted for state transfers, direct taxation or under-reporting. Hence at the regional level, the figures given for France in Chapter 1, based on national accounts data, probably represent the most accurate overview of regional income disparities.

Nevertheless, such figures are still of interest particularly given that the results are available at the sub-regional level (departement and commune). However it should be born in mind that relatively low income figures for certain departements may in some cases result from a very high share of farming population whose incomes are particularly underreported. On the other hand there is no reason to believe that such underreporting does in fact follow a systematic pattern at the regional level, and as it turns out, the relative position of most regions under this measure is very much the same as that produced from the national accounts figures in Chapter 1.

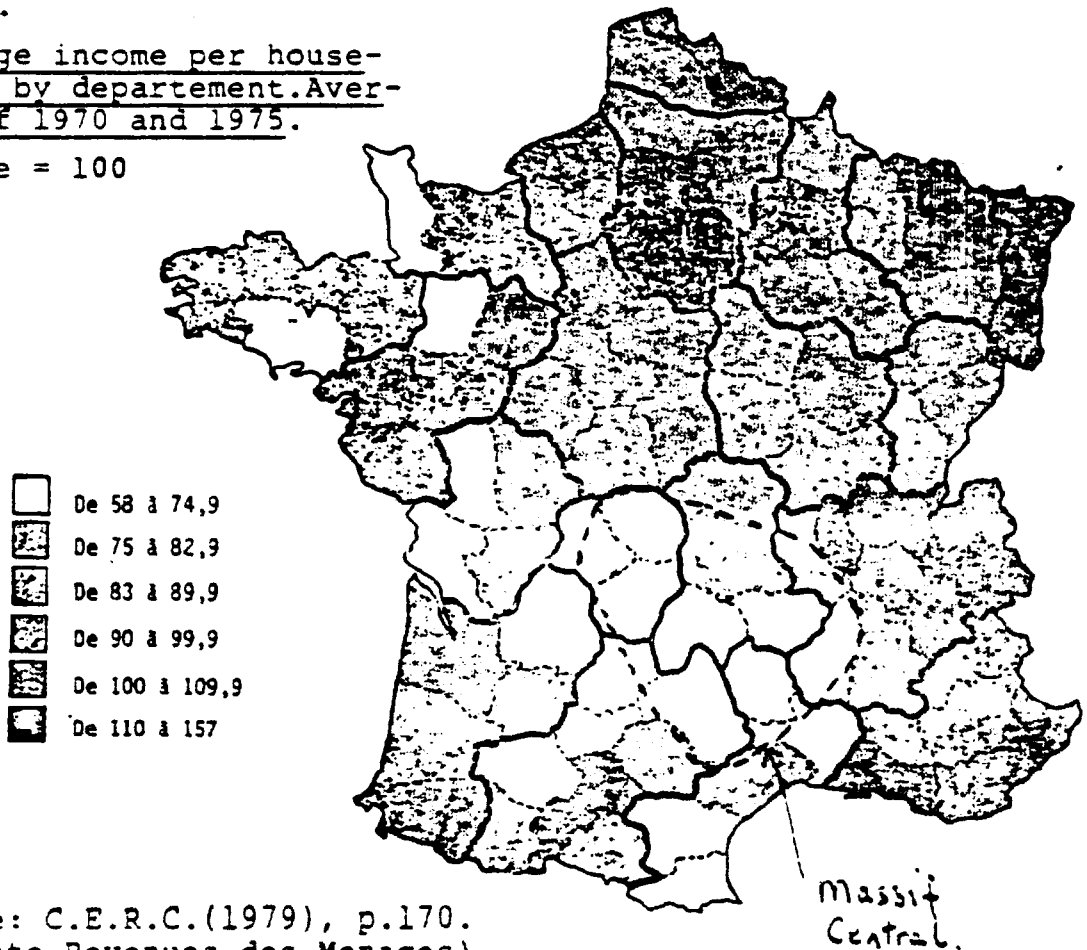
<sup>1</sup> Some 30% of all families, that is around 5,318,000; the average level of disposable income per A.E.U. came to Fr.18,500 per annum.

Several important remarks can be made concerning these figures. In the first place, greater spatial income inequality is apparent at the 'departement' level than at the 'region' level, and this would appear to be largely due to the fact that very substantial differences often exist within regions - particularly in the South West and Massif Central (see Map 1).

Map 1.

Average income per household, by departement. Average of 1970 and 1975.

France = 100



Source: C.E.R.C. (1979), p.170.  
(Enquete Revenues des Menages)

In point of fact, whilst the Massif Central constitutes a geographical whole, it does not conform to any administrative or general statistical boundary, and, whilst the area covered is quite considerable (1/6th of the country), the actual situation of the area in terms of income, population movements etc. is often overlooked as the relevant figures are invariably aggregated with the five 'regions' which overlap this area.<sup>1</sup>

---

<sup>1</sup> In 1968 the population of the Massif Central amounted to 3.4 million, having declined from some 3.8 m. in 1851 - that is whilst the French population as a whole increased by some 35%. See, Clout (1974) table 1.

In the second place, substantial income differences would also appear with respect to the level of urbanisation, although the size of such differences varies very much from case to case. Table 3 gives an example drawn from two regions, Limousin and Alsace. Figures of 101 and 118(France =100) for the two capital towns of these regions (Limoges and Strasbourg respectively), must however be compared with the very sizeable differences in average income between rural 'communes' in these regions (index 54 and 98 resp.) which in large part reflects differences in wealth of the surrounding countryside outside these two towns.

Table 3. Average household income in 1975 by size of commune.

Size/ Region/	<u>Limou\$in</u>	<u>Alsace</u>	<u>Paris region</u>	
<u>Rural communes</u>	54	98	117	
<u>Urban communes:</u>				
below 10,000 per.	80	99	129	
10,000 - 50,000	102	92	126	France = 100
50th.- 100,000	108	108	119	
100th.-200th.	101	112	135	
Over 200,000	-	118	-	
Paris (agglomeration)			138	
<u>Overall</u>	(77)	(106)	(136)	

Source: Enquete sur les revenus de 1975. CERC(1979),p.173.

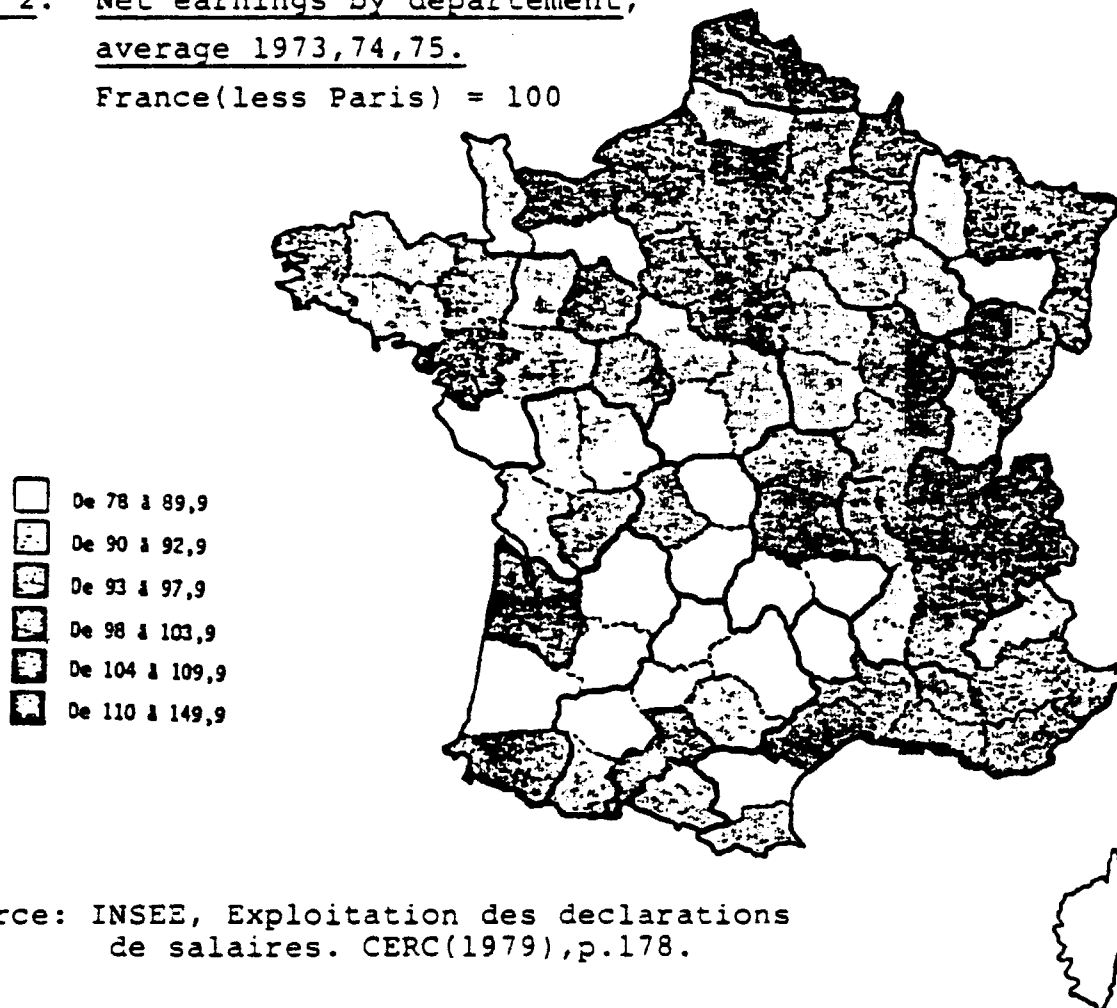
Thirdly, a similar pattern to the above arises if we consider household income by socioprofessional category and commune size, with larger urban communes (in most cases) exhibiting substantially higher average incomes than rural communes for any category (see table 4). Such differences are particularly noticeable in the case of 'inactifs'(retired) households, which suggests that for this category, the incidence of low-incomes and poverty may be of a pronounced rural character.<sup>1</sup>

<sup>1</sup> Differences in price levels should however be taken into account; whilst spatial differences can be assumed to be fairly small for goods and services, in the case of rents, if the price per square metre in a rural commune is expressed as 100, in the case of medium/large size towns the index rises substantially to 139. However qualitative differences are not taken into account. See CERC(1979),p.191.

Similar findings obtain when we consider average regional wages and salaries (Map 2) and the low-income regions are essentially the same (ie. Massif Central, S. West) as those outlined in Map 1 above, although the range, as one would expect is somewhat smaller. Moreover, the figures contained in Map 2 can hardly be accused of presenting a bias in one way or another<sup>1</sup> as was the case for the household income estimates.

Map 2. Net earnings by departement,  
average 1973,74,75.

France (less Paris) = 100



Source: INSEE, Exploitation des declarations  
de salaires. CERC(1979), p.178.

Again rural communes appear to fare worse on average than urban communes, and markedly so as table 3 brings out (see over).

Finally, table 4 summarises the results of the various income surveys at the regional level for 1975. The most striking point in table 4 is that five regions between them manage

---

<sup>1</sup> Although of course, composition effects may be substantial.

Table 3. Average household income and net earnings (wages and salaries), France 1975.

	<u>Household income</u>	<u>Net earnings*</u>
<u>Rural communes:</u>		
<u>Urban communes:</u>	71	74
under 10,000 per.	93	82/83
10th. to 50th.	98	87/90
50th to 100th.	102	94
100th. to 200th.	103	100
over 200,000	107	100/123
Paris(agglomeration)	138	Paris(centre)140
<u>France =</u>	<u>100</u>	= <u>100</u>

Source: CERC(1979),pp.197/179. \*Size categories do not always correspond to those in column 1.

to take almost all the bottom rankings in each of the five columns - in other words they are characterised by low average incomes, low wages, low farm incomes and low incomes for retired persons. These regions, most of which are contiguous comprise Auvergne, Bretagne, Limousin, Languedoc and Poitou-Charentes.

TABLE 4. Average earnings and incomes of non-wage earners by region in 1975. France=100.

Régions	Salaires moyen toutes CSP		Revenu moyen toutes CSP		Professions indépend.		Revenu des Exploitants agricoles		Inactifs	
Ile de France	125	2	136	2	121	2	197	2	144	2
Haute-Normandie	98	2	103	3	114	5	155	4	106	4
Provence Côte d'Azur	97	3	93	4	90	24	86	14	120	2
Rhône-Alpes	97	4	95	3	90	19	86	12	93	8
Alsace	96	6	106	2	129	2	114	8	110	3
Lorraine	95	6	95	7	116	4	140	6	93	9
Mord	93	7	96	6	117	3	128	6	95	7
Picardie	91	8	96	8	106	7	194	2	89	12
Centre	89	9	91	11	110	3	122	7	93	10
Aquitaine	89	10	93	10	90	16	86	15	100	5
Champagne	89	11	94	8	105	9	188	3	91	11
Midi-Pyrénées	89	12	86	14	86	17	76	19	96	6
Pays de la Loire	88	13	95	15	92	13	91	11	76	19
Bourgogne	88	14	96	13	98	10	106	9	95	13
Francie Comté	81	15	91	12	92	12	95	16	83	11
Languedoc Roussillon	87	16	75	21	79	21	34	18	77	17
Bretagne	87	17	81	18	96	11	76	20	81	15
Besse-Normandie	86	18	82	17	101	9	102	10	74	21
Auvergne	86	19	82	18	102	10	83	17	81	16
Limousin	83	20	76	20	85	18	77	18	75	20
Poitou Charentes	83	21	73	19	81	20	74	21	77	18

Source: INSEE, Exploitation des déclarations annuelles des salaires en 1975; INSEE, Enquête sur les revenus de 1975, CERC(1979)p.188.

Given the comments made in our previous section regarding the likely socio-professional incidence of poverty and low-incomes in France, and the results of this section pointing to the very marked regional concentration of low-level indicators for such groups, it is perhaps reasonable to conclude that poverty in France may well take on a very significant regional dimension. With respect to the category of retired persons, the results would indeed seem to point clearly in this direction. Again, for the category of farmers regional income differences would appear to be very marked. For the category of dependent employees(salaries), regional differences in earnings, although substantial are clearly less marked than for the above two categories. Furthermore, whilst low-earnings together with large family size were both factors which could be assumed to explain poverty within this latter group, there is very little to tell us whether low earnings in particular were primarily due to low hourly wages, or more the result of part-time(or non-full-time) employment. Indeed, if it were the case that temporary employment was more prevalent in certain regions than in others, it might even arise that the incidence of poverty within this group would in fact be highest within some of the relatively high income regions. This of course presents a limit case, but in general the final result may indeed be very substantially influenced by local conditions within the regional labour market. In the absence of further information nothing more can unfortunately be said regarding the likely spatial configuration of poverty within this group.

• The rural aspect of poverty and low-incomes in France.

It goes without saying that the level of economic well-being in predominantly rural areas is often heavily dependent on the economic performance, productivity and income deriving from the agricultural sector.

In France this sector continues to exhibit very substantial regional inequalities in agricultural earnings as figures for 1979 show(see annex)<sup>1</sup>. Moreover, whilst some regions(eg.Bretagne)

---

<sup>1</sup> Main-living farms only are considered.

appear to have substantially improved their position in recent years , other areas have continued to lag behind. As a result, France would now appear to be effectively divided into two separate 'blocks' as far as agricultural earnings are concerned.

In the Massif Central for example, seven départements out of nine have average gross earnings below 62% of the national average (the remaining two being below 80%). In the South West and Pyrenees almost all départements are below 80% of the national average.

Although poverty in agriculture is not limited to the small-scale sector\* it is true to say that if there is a problem of poverty in French farming, it is primarily within this sector. Not all farmers below 20 ha. have low incomes though; intensive farming for instance can be quite profitable at this size; furthermore, a certain number also have jobs outside agriculture (below 5 ha. over 1 in 3 farms . are run by people whose main job is outside farming).

Detailed consumption statistics would have proved helpful in this analysis. The problem here is that the consumption of farmers is not generally measured according to farm size - the most recent survey which does, dates from 1965 and only covers two départements. Moreover, no survey permits us to isolate small farmers as none takes into account the production system and the farmer's age<sup>1</sup>. We may note, however, that in the 1965 survey of Eure-et-Loire personal consumption on farms of less than 10ha. and less than 20 ha. was respectively 40% and 50% that of farms above 50 ha. Given that personal consumption for agricultural households was 20% below the national average (in 1972) and the sizable disparities in income and consumption in this sector, one may guess what order the privations of many small-scale farmers may attain.

If the disparity in consumption between the agricultural and national populations appeared to remain the same between 1965 and 1972, in practice it increased since part of the increase in average

---

\*"Superficie minimum d'installation" - less than 20 hectares.

<sup>1</sup>"La condition sociale des petits paysans", p. 393

farm consumption was due to the disappearance of a large number of small-scale farmers.

In spite of their low incomes, many small farmers are the owners of their property. One may therefore ask the question whether this factor is able to significantly improve their status. "The analysis of the size of this fortune, of its structure, the conditions of its acquisition and its utilisation, lead to a negative reply.."<sup>1</sup>. Not only is their capital modest in comparison with other categories of farmers but its resale value is even less (in many cases close to zero).

As for housing, national statistics show that the proportion of families occupying sub-standard accommodation is much higher in agriculture than for the nation as a whole. According to a survey of Ille-et-Vilaine (1970), households with less than 10 ha. were in all cases without bath or central heating, in one case in two without running water, and in some cases lived on a floor of beaten earth. The proportion of dwellings with only one room was 33% below 10 ha. and 13% between 10 and 20 ha. The conditions were worse in the case of rented property under 10 ha. "In which one found one roomed houses (42% only had one room) in ruinous condition with floors of beaten earth and without any facilities"<sup>2</sup>

Another aspect in which farmers find themselves at the bottom of the social scale concerns education. The cases of "no schooling" or "only primary education" are more frequently found on farms below 20 ha.<sup>3</sup>. Although the statistics available are somewhat dated<sup>4</sup>, they are still of importance as the figures given are by age, hectarage and level of education and are for France as a whole. They show firstly that in each age group, small-scale farmers are significantly worse off than medium/large scale ones.

---

<sup>1</sup>Les petits paysans et la pauvreté

<sup>2</sup>Les petits paysans et la pauvreté

<sup>3</sup>"La condition sociale des petits paysans" p. 394

<sup>4</sup>S.C.E.E.S., enquête structures, STATISTIQUE AGRICOLE 1967

<sup>5</sup> The 1975 census in Limousin found that in agriculture, only 28% of dwellings had a bath or shower, and only 16% central heating.



For example in the age group from 50-64 years, 16% of farmers over 50 ha. and only 3% of farmers from 5-20 ha. had some secondary or higher education. In the under 35 years category the figures were 22% and 5% respectively. One would perhaps have expected the difference between age groups to have been more marked. The fact that it was not allows us to draw the second point from this survey - that the general level of education of small-scale farmers today (in the middle-age category and over) is probably little better than that of their predecessors ten years ago.

"As a result, at least in part, of their low educational level small-scale farmers are rarely engaged in union or professional representation".<sup>1</sup> Recent research suggests that not only the share of farmers engaged in such activities but also the importance of such engagements varies proportionally with farm size.

There is every reason to believe that under-education concerns not just the farmers themselves, but their children as well. In other words, the backwardness is cumulative. According to a survey made in Finistère by the I.N.R.A. for the generations 1945-55, whether one considered school leavers or those in apprenticeship and at work, the percentages in these groups were much higher from 16 years onwards in the smallest farm size categories. At 18 years of age only one child in four was still at school in non-specialized farms under 10 ha., and one in three from 10-20 ha., compared to one child in two in the most favoured group. For the children from the smallest farms, working apprenticeships predominate: for those from larger farms, secondary and higher education is the rule. As for agricultural training schemes, "the higher the level of instruction the lower the recruitment from agriculture and the less it has to do with the children of small-scale farmers"<sup>2</sup>.

Perhaps it is such studies of social heredity which point out most vividly the disfavoured position of the small farmer. As Jegouzo and Brangeon conclude, "Invariably excluded from agriculture,

---

<sup>1</sup>"La condition sociale des petits paysans", p. 305

<sup>2</sup>op. cit., p. 396/7

children born into small farm households more often than not become manual workers; not only the probability of becoming manual workers but also that of not being able to go any higher, are indoubtedly higher for the children of small farmers than for those of manual workers."<sup>1</sup>

Another measure of social deprivation which has been used concerns prolonged or total celibacy. In agriculture, as for the rest of society, the probability of getting married increases as a function of a person's economic and social rank. The observation of a general inverse correlation between the frequency of celibacy and a person's social position and the existence of a high degree of celibacy amongst small-scale farmers serves to confirm the low social rank of this group. In this sense the degree of celibacy is also an indicator of deficiencies in a whole series of spheres.

Figures available from the 1968 population census make this point quite clear. For farmers between 40-49 years the average rate of celibacy (13%) is about that of manual workers and labourers. This average figure though, is misleading as the chances of remaining unmarried are high only for farm sizes below 20 ha. Farmers with 50 ha. or more marry as often as those in the middle and upper classes. By contrast for farmers with less than 15 ha. the rates of celibacy are abnormally high and increase as the size of the holding diminishes, such that for farms under 5 ha. one farmer in three is unmarried. Figures for younger age groups give no reason to believe that the situation for them is any better - indeed, for all farm categories above 10 ha. the rates of celibacy in the 30-34 years group are somewhat higher than for any of the older age groups.

Lastly, in this section, we should briefly consider the social security provisions for farmers. It is worth mentioning that in many instances the agricultural sector, and particularly

---

<sup>1</sup>op. cit. p. 385

the self-employed farmer has only recently been awarded the same provisions as the rest of society\*. There remain, however, certain points on which the self-employed farmer (and other self-employed persons) finds himself at a distinct disadvantage. These points mainly concern the loss of earned income, against which risk the farmer finds himself poorly insured.

In the case of illness the AMEXA provisions are limited to medical expenses: they do not include daily payments in the case of cessation of work. As for invalidity pensions, these are only awarded when the degree of incapacitation exceeds 66%, and then not in all cases. It should also be mentioned that the value of this pension is generally less for farmers than for salaried workers (who receive half their average salary) - its value in 1977 was a mere Fr. 5,598 in the case of total incapacitation. We may also add that although family supplements and medical insurance apply equally to all persons at a national level, there is evidence to suggest that a significant degree of non take-up exists for farm households in these sectors. This is due not only to the failure to claim family allowances but also to a lower level of consumption of medical services<sup>1</sup>.

#### Farm income and the regional distribution of incomes

In this section we intend to look into several aspects of farm income - fluctuation, saving, debt, income support and part-time farming. To conclude we shall look at farm income in a regional context.

In many respects the insecurity of farm income may be as much a source of hardship as its low level - net income may sometimes be negative and of course those farmers with few resources are least able to make provisions against such loss. There is no minimum guaranteed income for farmers, unlike wage/salary earners. Although

---

\*For a detailed survey see Droit Social No. 9-10, 1977: "L'évolution des revenus sociaux en agriculture".

<sup>1</sup>p. 350, op. cit.

many farmers benefit from fixed minimum prices, prices are only a small part of the problem - output may vary substantially or, as has been seen in recent years, the prices of certain inputs may rise faster than prices for final output.

In any case, given such variability it is clearly necessary for the farmer to have a higher savings ratio than his salaried counterpart in industry or commerce. Furthermore, the mere continuation of agricultural production requires the farmer to make investments from time to time. In many instances such outlays may entail a substantial compression of personal consumption. "In cases where the capacity to save is restricted the lack of capital resources may be a source of further privations - or of overwork - that is, diverse forms of poverty."<sup>1</sup>

In fact small-scale farmers have greater recourse to self-financing than their larger counterparts - partly because they tend to be refused credit more often. In spite of this many of them find themselves in heavy debt. For beef and dairy farms from 5-10 ha. short-term credit alone averaged half of gross farm income (in 1973), and one third for farms from 10-20 ha.<sup>2</sup>

A final point to consider is the flow of farm income. On some types of farm (mainly dairy) this flow is fairly regular, but in general the opposite is true. It should be clear that this in turn implies a high ratio of savings for transactionary purposes where such irregularity is pronounced.

Having considered some of the factors to be taken into account when assessing farm income, it seems clear that its value in terms of consumption possibilities is generally lower than would appear from net income figures. A relatively large proportion must go towards savings - where this is not possible consumption may be periodically reduced to very low levels.

In view of the hardships associated with low farm incomes it would seem surprising if nothing at all were done by the government in cases of real need. Indeed, in the case of very unfavourable

---

<sup>1</sup> La condition sociale des petits paysans, p. 392

<sup>2</sup> 35.6% of farmers had long term debts of over 3 years.

movements in farm income there exist special measures which give some degree of compensation. Essentially these consist of a V.A.T. allowance and a direct payment per animal. The latter is of greatest importance and has become a permanent measure in mountain regions. It corresponds to the "compensatory allowance" in the European Community directive on mountain farming and farming in certain less-favoured areas, and applies to main-living farms of over 3 ha.\* The allowance amounts to Fr. 200 per cattle unit up to a maximum of 40 units per farm. For a typical herd of some ten units<sup>1</sup>, Fr. 2,000 a year is hardly likely to make more than a small contribution to the farmer's relative income position. Furthermore retired persons and part-time farmers earning more than 50% of their total income outside farming do not qualify for this grant. Hence the paradoxical situation arises where the lower farm income, the lower must be the farmer's non-farm income in order to qualify! In other words the situation may arise where a small-scale farmer who needs an off-farm job to live, either is excluded from the scheme (because his farm income is not high enough or his off-farm income not low enough) or must give up his off-farm job.

A measure of the coverage of this scheme is that over a third of these grants may go to valley farmers with little difficult terrain<sup>2</sup>, due partly to the factors we have just mentioned and also because of the failure to specify mountain regions as closely as would be desirable.

Undoubtedly, the provision of direct payments to low income farmers represents a potentially powerful method of eliminating rural poverty at its source. In view of its limitations, perhaps a better method than the one mentioned above would be to supplement family incomes below a certain level. This approach, by the way, has been used in Switzerland since 1954, together with a series of indirect grants.

---

\*Why 3 ha. is something of a mystery - presumably farmers with only 2.9 ha. are not in need of such a supplement!

<sup>1</sup>For France as a whole 30% of herds are below this size and in such cases would consequently receive proportionally less.

<sup>2</sup>According to a survey of the Voges in "Pays, Paysans, Paysages", INRA 1977. ./.

The regional distribution of farm incomes.

The final section of this paper aims to give some idea of the regional distribution of low incomes in agriculture. For this we use the "réseau d'information comptable agricole" (RICA) which, since 1968 provides statistics on net agricultural income by unit labour input<sup>\*</sup>. The survey covers about 3,000 farms for which farming is the main activity. Although the survey does not take into account non-farm incomes, as we shall see later, this does not directly affect our present analysis.

If anything, the survey as a whole tends to underestimate the weakness of incomes in some sectors. Not only are farms under 5 ha. excluded from the survey, but the less intensive categories from 5-10 ha. are severely under-represented (as can be seen in table 6).

Table 5 gives the results obtained from the surveys of incomes in 1970 and 1971<sup>\*\*</sup>. The production categories chosen in the table exclude the most intensive types of farming which are not of immediate interest here.

Unfortunately the regions are grouped together in most instances - however, this is done for regions which are broadly similar in any case, so the comparison remains valid. It should also be noted that the production systems as classified in table 5 between regions - hence, for example cattle farming may be more extensive in some regions than in others - and accounts for the wide income variations within each category.

Four earnings groups are given in table 5. Agricultural earnings in terms of income per unit of family labour (per annum) are compared to the S.M.I.C. estimated on a yearly basis, the average annual earnings of labourers and the average earnings of semi-skilled workers<sup>1</sup>. The groupings are as follows:

$$Z_1 \leq 80\% \text{ of the S.M.I.C.}$$

$$80\% \text{ S.M.I.C.} < Z_2 \leq \text{S.M.I.C.}$$

$$\text{S.M.I.C.} < Z_3 \leq \text{average earnings of labourers}$$

---

<sup>\*</sup>One unit = 280 days work per year

<sup>\*\*</sup>After this date the small-farm sector's representation in this survey declined

<sup>1</sup>Calculated by Jegouzo & Brangeon in "La Condition sociale des petits paysans" ./.

average earnings labourers  $< z_4 \ll$  av. earnings of semi-skilled labourers

average earnings of semi-skilled  $< z_5$

Although table 5 is essentially based on statistics for 1971, the figures for 1970 have also been indicated where the grouping has increased by at least two groups or where there has been a decline in the period 1970-71.

The results are rather striking. The regions of the north and north west (the last five regions in Table 5) are clearly most favoured. Only the smallest farms (5-10 ha.) in cattle production are earning less than the S.M.I.C. rate and no categories are earning on average less than 80% of the S.M.I.C. The situation is the reverse for Auvergne and Limousin, and all the more worrying because the categories examined cover the most typical types of farming undertaken in these areas\*. Here, only farms which have turned, at least partly, to more intensive pig or poultry production are earning, on average, over 80% of the S.M.I.C. level.

Although, of course, there are farmers to be found with very low incomes in all regions, the low average figures for Auvergne and Limousin suggest that the extent of low incomes in agriculture is likely to be relatively high in these regions.

It is indeed surprising that there should be so much variation in farm income between regions, for almost all the categories considered. It would seem to point the way for the eventual disappearance of small-scale farming in such poor agricultural areas. Indeed, the problem of rural decline is closely linked to this question - to which we shall return in a later chapter. For the moment, as regards income we may suggest three measures which may be (and to some extent, are) used to solve this problem. Firstly, income support to supplement low incomes as we mentioned earlier. Secondly, structural policies

---

\*with the exclusion of sheep farming which is always on much larger surfaces anyway.

TABLE 5.

Production- sector,	- LITTOUSIN -		- Midi-Pyrenees -		- Rhone-Alpes -		- CHALIPAINE -		- Pays de Loire-NORMANDIE -		- Nord -	
	-	ALVERGNE	-	AQUITAINE	-	FRANCHE-Comte	-	FOITOT	-	PIEDMONT	-	PIEDMONT
cattle & arable (10-20ha.)	Z1		Z4*		Z5		Z2		Z4*		Z5	
cattle & (" " " " ) permanent crops			Z1*									
cattle (10-20ha.)	Z1		Z4*		Z4		Z4*		Z5		Z5	
cattle (5-10ha.)			Z2		Z1*				Z2			
arable & cattle (10-20ha.)			Z2+						Z4			
permanent crops & cattle (10-20ha.)			Z2+						Z5			
cattle, sheep & goats (10-20ha.)			Z2									
cattle, pigs & poultry (10-20ha.)	Z2		Z2						Z5			
cattle, pigs & poultry (5-10ha.)									Z4*			

\* = Z2 in 1970 + = Z3 in 1970 ; Indicated where decline to  
lower grouping or where rise in grouping (2 or more) from 1970-71.



to promote farm enlargement, by providing credit and by removing some of the imperfections of the land market. Thirdly, policies to improve production techniques and especially to promote more intensive lines of production (e.g. pigs) which yield higher labour incomes per hectare.

Unless such policies are actively implemented, the problem of low incomes in agriculture will remain for some time to come, and will only be reduced, at length, by a reduction in the agricultural population - which in many poor farming areas will imply substantial depopulation. In other words, in view of the fact that the problem must be faced in the present, and that the structural measures mentioned above are mainly of value in the medium/long term, the necessity arises to implement farm income support in the short-term. The alternative spells the continuation of rural poverty far into the foreseeable future.

Another method of determining the regional distribution of low incomes in agriculture is to consider the results of the surveys of agricultural production in the mountain regions. These surveys were conducted for 1970 and 1975 by the Ministry of Agriculture.<sup>1</sup>

Although all departments with classified mountain farming communes were included, it is worthwhile noting that many of these areas were fairly small, and were widely distributed over most of southern and eastern France. In fact there are only six major mountain farming zones as classified by the Ministry of Agriculture. In order of size these are: (i) the Massif Central, (ii) the Alps (north and south), (iii) the Pyrenees, (iv) Corsica, (v) the Jura, and (vi) the Vosges.

Thesesix areas have the status of "unfavourable

---

<sup>1</sup> Ministère de l'Agriculture. Collections de statistique agricole 1978 N°158.

farming areas" and "rural renovation zones", both of which bring additional financial benefits, which we shall return to at a later point.

By far the largest grouping of mountain farms is to be found in the Massif Central ; this area alone accounts for over 50% of such farms.

Before considering in more detail the survey results broken down by department and farm size, we should make a few general points concerning the overall development of mountain farming from 1970-75.

Mountain farms, which represent 13.2% of all farms in France, contributed only 6.7% of final agricultural production in 1970. In 1975 this proportion was virtually unchanged (6.8%). The result was that average output per mountain farm in 1975 remained unchanged relative to the average for all farms, at half the value of the latter figure.

Farm income however, increased at a faster rate for mountain farms than for the agricultural sector as a whole. This development was mainly due to an increase in mountain farming subsidies, principally the I.S.M. (indemnité special de montagne) and other aids to husbandry. By 1975 such subsidies accounted for 15.6% of mountain farm revenue, as against only 2.7% in 1970. In 1975 average gross farm revenue of mountain farms had reached 63% of the national average.

Of the main mountain farming departments, some appear to have done better than others over the period 1970-75. The three most favoured departments, found in Bourgogne and Franc

-Comté, easily maintained their lead. Average income here was well above the national average for all farming. At the other end of the scale, departments such as the Vosges, Haut-Rhin, and Savoie (av. income per farm around Fr.12,000 per annum), registered average annual increases in income between 5.8% and 12.2% ; well above the average for all farming (3.8%). The exception here was Ariège in the Pyrenees where income in real terms was almost stationary.

Although it is not possible to go into great detail, we may safely make a few generalisations of major interest concerning the various regions and sectors. All mountain farming regions had departments both at the upper and lower ends of the middle range.\* In the eastern Alps however, three departments registered declining real incomes. Only Savoie made good progress, but here, as we have seen, average income was still very low. The Alps appears to be the only mountain farming region not to have benefitted from the very positive developments experienced elsewhere.

On the other hand, in the Languedoc, apart from the Lozère department, the remaining four experienced average annual increases in income of between 11% and 21.5%. In the Massif Central, most departments were close to the average increase of 7.6% per annum.

Turning to the sectoral results for 1970, one finds that on average only (mountain) farms above 10 ha. had a gross farm income per labour unit equivalent to or above the S.M.I.C.<sup>1</sup> level. Around 47% of all mountain farms were below this size,

---

\* ie. 16-38,000 Fr. per farm in 1975. Note though, that the average income for all farming was Fr.36,842.

<sup>1</sup> Given the fact that this source includes part-time farmers and covers (gross) agricultural income only, 'farm income' cannot be considered to be equivalent to disposable or even gross total income, and comparison with the SMIC is only put forward as a rough guideline. Nevertheless, it seems reasonable to assume that availability of other forms of occupation or earnings will probably be quite limited in many of the mountain regions considered, although in a number of cases farm households will certainly be in receipt of various forms of state transfers (pensions, child benefits etc.).

which indicates to some degree the extent of the low income problem in mountain farming.

In general, stock-farming or mixed stock-farming gave the lowest incomes per labour unit for all farm sizes. Here, only for sizes above 20 ha. did one find average incomes above the S.M.I.C. level, and then only marginally so.

Where crop farming, fruit or vine growing predominated, average incomes in even the smallest farm sizes ( including 0 to 2 ha. in some cases ) were generally above the S.M.I.C. level.

These results suggest that with crop, fruit or vine production a policy which promotes farm enlargement may have a significant impact on farm incomes. On the other hand, where stock-farming is concerned, the scope is probably limited. Although large, many farms are clearly so extensive that incomes are correspondingly low. In these cases much of the land is very poor and probably better suited to forestry.

Clearly income support measures are called for, although , as in the case of a subsidy per animal (eg.the I.S.M.), the effect is often regressive unless some type of means-tested benefit is used.

To conclude, as we have seen, mountain farming subsidies have played a major role in improving the relative position of the mountain farming sector. However since detailed results are only available for 1970 we are unable to tell whether the overall result has been more or less equality within this sector. Given that, by their nature most hill farm subsidies tend to favour the larger farm sizes, it is likely that many mountain farmers at the bottom of the scale have not progressed as fast as the overall results would

seem to indicate. Furthermore the poor results of several departments in the Alps show that such subsidies have had very diverse regional impacts.

If the main aim of hill farm subsidies is to raise low farm incomes, then a means tested benefit which is not sector specific is more cost effective than an I.S.M. type subsidy and also more equitable in its regional impact.

A final point we must mention concerns part-time farming. The figures in Table 5 as was stated, are solely related to agricultural income. We know that a certain proportion of farmers earn incomes from off-farm employment. How could this change the picture we have presented above?\*

Firstly, we know that a greater proportion of small farms are run part-time. From 5-10 ha 24% of farmers have an off-farm job - the figure is 12.4% for farms between 10 and 20 ha.<sup>1</sup> The above survey however treats main living farmers, and only around 7% of these have secondary occupations. One may therefore conclude that the addition of an off-farm income only affects a small minority in the survey.

Perhaps we should also mention that the off-farm activities of small-scale farmers are also on a smaller scale. As we look at the various categories of off-farm jobs and the average farm sizes attached to them, we find that the occupations with the lowest accompanying farm sizes are (in ascending order) farm labourers, factory workers and forestry workers<sup>2</sup>.

If, lastly, we consider the numbers of farmers in the 1-20 ha. category we find that they are in fact in the majority. 59%

<sup>1</sup> OECD op.cit. p.12.      <sup>2</sup> Ibid. p.22.

\*From recently gained statistics which cover non-agricultural earnings of (all) farm households we may gather that a very substantial number of units disposed of very low agricultural and non-agricultural incomes. In 1975, for the category of main living farms (without pensions), some 307,000 units from 10-35 ha. (blé-équivalent) disposed of an average gross taxable income of only Fr.14,400. Some 78,000 units disposed of an average income of around Fr.12,300. E & S, INSEE(1980), p.37.

of all farms in France are in this category, some 709,000 in all. Over a third (36%) of all farms are below 10 ha.

Of these we know that many are indeed viable, and others are run in combination with a part-time job. Indeed of these 709,000 farmers around 178,500<sup>1</sup> have an off-farm job of some description. On the other hand, a similar number in this category are underemployed on the farm (below 5 ha. well over a third of all farmers are underemployed).

If the possibility of finding an off-farm job is one method of augmenting a low farm income, it is not always the case that such jobs are most readily available where they are most needed. The Massif Central in particular, is badly off - Limousin has the lowest<sup>2</sup> figures for part-time farming, followed closely by several other départements of the Massif Central and surroundings.

#### Summary

Although, given the existing statistics, it is not possible to define more closely the regional incidence of low incomes in agriculture, the general impression is one of wide regional disparities. It is also clear that rural poverty is by no means limited to a few regions as some of the aforementioned surveys on living conditions show.

Apart from the income support and structural measures previously discussed the need for regional development policy to provide opportunities for part-time employment in some of the more depressed areas such as the Massif Central\* is also clear. For without such long-term policies the continuity prospect of rural poverty is unlikely to be averted.

If the present survey has concentrated on poverty within the agricultural sector it is with due cause, for as we have seen the state provision of a minimum income or standard of living has not yet reached this sector. Furthermore, the farming population is invariably to be found at the bottom of the social scale whether we look at education, housing or other social indications. It is for these reasons that their particular situation merits special attention.

---

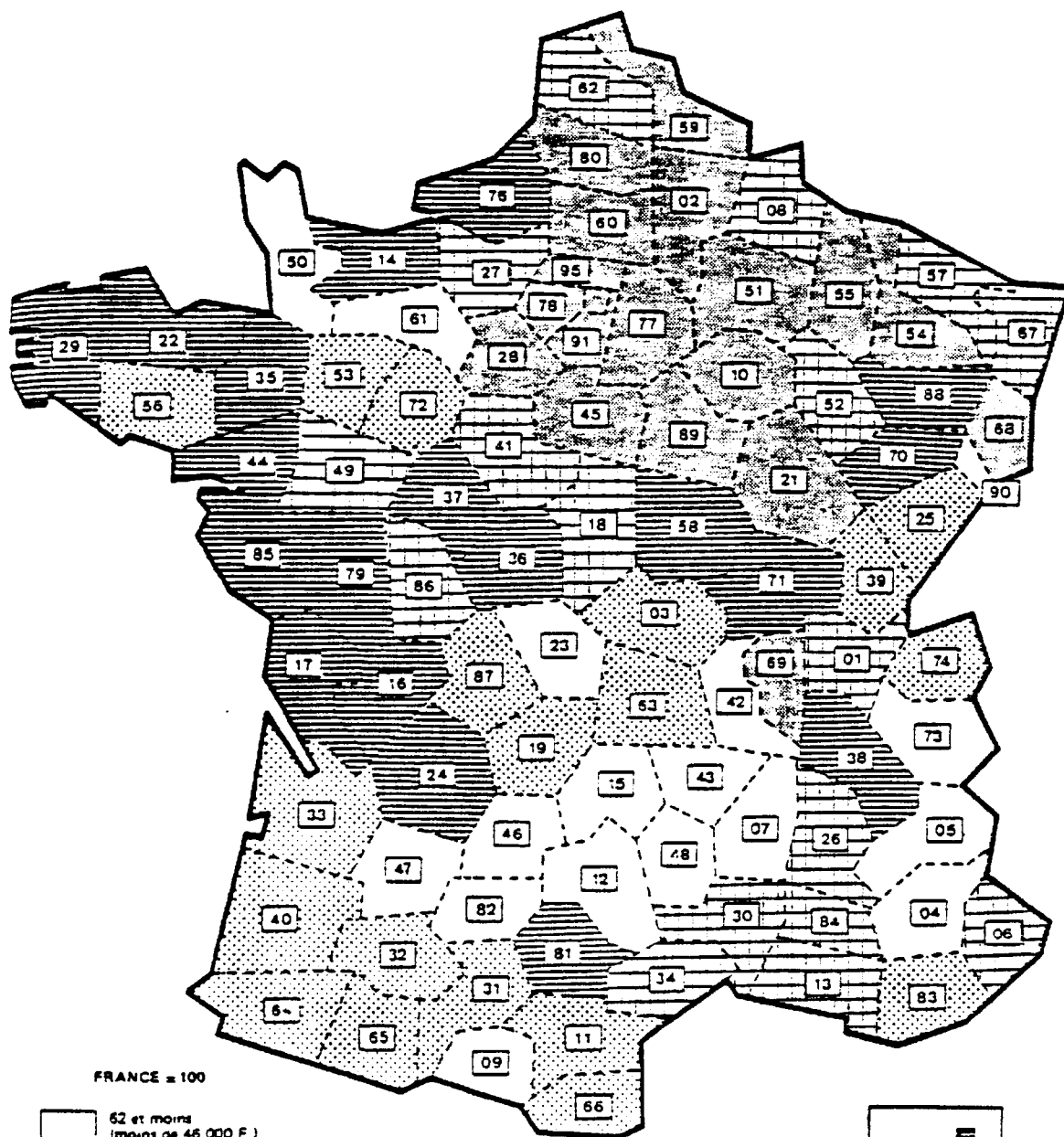
<sup>1</sup> Own estimate using OECD & EEC statistics

<sup>2</sup> OECD, pp. 15 and 41

\*Essentially Limousin and Auvergne

Annex

EXPLOITATIONS A TEMPS COMPLET  
R.B.E. moyen par exploitation en 1979  
Position par rapport à la moyenne nationale



Source : INSEE, Série R, 1981

B I B L I O G R A P H Y

-----

- "Les revenus primaires des ménages en 1975"  
Economie et statistique N° 103, sept. 1978
- "Les revenus des français" Centre d'etudes des revenues et  
C.E.R.C. 1977/79 des couts.
- "La condition sociale des petits paysans"  
G. JEGOUZO et J-L BRANGEON  
INSEE "Données Sociales", .1978
- "Les petits paysans et la pauvreté"  
J.L. BRANGEON  
supplément aux Cahiers français N° 187, 1978
- "S.C.E.E.S. - enquête structures"  
Statistique agricole 1967
- "L'évolution des revenus sociaux en agriculture"  
Droit sociale N° 9-10, 1977
- "Pays, Paysans, Paysages"  
INRA 1977
- OECD "Part-time farming" (country studies)
- EEC "The Agricultural situation in the Community" 1978
- "Approche des resultats economiques des exploitations  
agricoles de montagne" Coll.de Stat.Ag. N°158 Jan.1978
- "Donées Sociales" INSEE 1978
- "Public Expenditure on Income Maintenance Programmes" OECD 1976
- "Revenus des agriculteurs", Economie et Statistiques, INSEE  
No. 124, August, 1980.



2.5.

Conclusion

Since we have already summarised our findings for the three countries at the end of each survey, we shall limit this section to the main points only:

(1) It is clear that, as far as the working population is concerned, poverty is particularly evident in the agricultural sector for all three countries considered. We may make several qualifications; in France this is largely due to the existence of a minimum wage (the S.M.I.C.) covering the whole of the (adult) dependent workforce. In Italy and Ireland the poor quality of much of the utilised farmland and the backward structure of many farms (small size and fragmentation) are clearly contributory factors. It must however be stressed that the high levels of poverty in urban areas and occupations in Ireland and Italy are evidence of a high incidence of low incomes in these sectors also. It is significant that in some regions of Ireland the urban areas were no better off (in terms of av.income per person) than the rural areas.

(2) In general the national income maintenance programmes (or lack thereof), were a major factor in determining the overall level and distribution of poverty. For the employed, family supplements in Ireland and Italy clearly had only minimal impact on the disposable income of low-paid workers relative to the actual cost of additional dependents. In France however, these benefits would probably finance a large part of the extra cost of providing for children.

In all three countries the minimum (non-contributory) old-age pension was very low, and in the case of Italy and Ireland this resulted in a large proportion of retired households falling below the poverty line. The situation was

probably similar in France where around 30% of retired persons received the "minimum vieillesse" pension.

(3) It would appear that the extent of poverty is much greater in the so-called less developed regions than for the nations as a whole, in all the countries considered. The differences in the incidence of poverty between northern and southern Italy were so great that one had the distinct impression of dealing with two separate countries. In Ireland although the incidence of poverty was still high by international standards for urban areas, the position of several predominantly rural regions was markedly worse. In particular the region N.W. & Donegal could be singled out as having probably the highest incidence of poverty.

In France the analysis was more problematic. It appeared that the regions with the poorest agricultural structures were undoubtedly the mountain farming regions. One might therefore expect relatively high levels of poverty in regions where this type of farming predominated. As it happened the largest concentration of such farms was to be found in the Massif Central.

(4) Following from the above, we have largely been able to identify the poorest regions within the LDR's we have considered. It has been possible to attribute a large proportion of poverty in these areas to the weakness of the agricultural sector and the rural economy as a whole. Certainly an income support programme for low income farmers would not by itself provide a long term solution to the problem, although it would undoubtedly remove some of the harshest forms of rural poverty. Clearly more effective structural policies for agriculture are needed, combined with real efforts to stimulate the urban framework within these regions.

There is perhaps one explanation why so little has been achieved as far as agricultural reform is concerned; namely that many of the rural economies we have considered would lose a large proportion of their population as a result of such change. In a sense this is already happening as younger generations are becoming more unwilling to submit themselves to the physical rigours of farming under difficult conditions and in isolated areas.

Certainly at the present time it is difficult to imagine any national government would contemplate radical measures which would tend to increase the outflow of labour from agriculture. Perhaps one alternative is to promote prospects for part-time employment outside agriculture. This could be done via tax and aid incentives to farmers and by promoting industries which could be identified as suitable for this purpose. In a sense this implies a new look at regional policies and a scaling down of objectives to fit in with rural needs. It is a subject to which we shall return in later chapters.

---

Conclusion

In assessing these chapters it is important to stress to the reader that our purpose was essentially to show, beyond doubt that poverty does exist, and emphasise the regional dimension of this problem, rather than to provide any hard and fast inter-country comparisons. Given the procedure adopted and the data available, it was quite simply not possible to make such comparisons. The reader should therefore bear this point in mind when assessing the main conclusions of our study, outlined below. Detailed results relevant to the respective countries are to be found in the summaries to each study.

1. It is clear that, as far as the working population is concerned, poverty is particularly evident in the agricultural sector for all three countries considered. We may however make several qualifications; in France this was largely due to the existence of a minimum wage (the S.M.I.C.) covering the whole of the (adult) dependent workforce. In Italy and Ireland, the poor quality of much of the utilised farmland and the backward structure of many farms (small size and fragmentation) were clearly contributory factors. It must however be stressed that the high levels of poverty in urban areas and occupations in Ireland and Italy are evidence of a high incidence of low-incomes in these sectors also. It is significant that in some regions of Ireland, the urban areas were no better off (in terms of average income per person) than the rural areas.

2. In general, the national income-maintenance programmes (or lack thereof), were a major factor in determining the overall level and distribution of poverty. For the employed, family supplements in Ireland and Italy clearly had only minimal impact on the disposable income of low-paid workers relative to the actual cost of additional dependents. In France however, these benefits would probably finance a large part of the extra cost of providing for children.

In all three countries the minimum (non-contributory) old-age pension was very low, and in the case of Italy and Ireland this resulted in a large proportion of retired households falling below the poverty line. The situation was

ANNEX

One of the major findings of this survey was the link between poverty and large family size. It is therefore instructive to make an international comparison of family benefits. The statistics are drawn from the "Comparative tables of the social security systems in the Member States", published by the Commission, and were correct on 1.7.76.

In Italy the family benefit amounted to Lit. 9,880 per child per month. If we translate the Italian poverty line in 1976 prices the levels are:

Lit. 7,450 for a two-year old

Lit. 18,625 for a five-year old

Lit. 29,800 for an eight-year old

Lit. 37,250 for an adult (note: food only)

For a family with several children the benefit would only make a small contribution to the necessary food expenditure and no contribution to clothing or housing costs.

The weekly Irish allowance varied from £ 2.30 for the first child to £ 3.60 for the second and £ 4.35 for each further child. If we make a rough comparison with Italy the poverty line would be somewhere around £ 20 per month. In other words the allowance would be just sufficient to feed a two-year old but only about a quarter of that required to feed an eight-year old.

In France however, the child allowance amounted to Fr.(mnth) 153 for the 2nd child, Fr. 257 for the 3rd and 4th, and Fr. 229 for subsequent children. These figures are increased by 9% for children between 10 and 15 years and by 16% for children

over 15 years. In 1978, the various other family allowances were grouped together into the "complément familiale", which is paid in addition to the child allowances and which benefits families with a child under 3 years or at least three children. In 1978 it amounted to Fr. 340 per month.

Quite clearly, even taking account of the fact that purchasing power may vary between countries does not alter the impression that French family benefits are by far the highest and most comprehensive of the three countries considered. Under these circumstances one might not expect a significant link between poverty and family size in France although for the other two countries the reasons for this link would seem self-explanatory, in the light of the preceeding comments.

o o o o o o o

P A R T        T W O

---

REGIONAL   DEVELOPMENT   THEORY

---

Chapter 3        The process of regional development

- 3.1.   Spatial factors; dynamic considerations on  
      the regional growth process
- 3.2.   A formal model of regional growth  
      - regional growth and regional income
- 3.3.   The rationale for regional policy

Annexes,1,2.

Chapter 4        European centre-periphery relations in the  
                     context of European integration

- 4.1.   Location theory and economic polarisation
- 4.2.   The changing nature of the European Community's  
      regional problem





# R E G I O N A L   D E V E L O P M E N T   T H E O R Y

## CHAPTER THREE

### THE PROCESS OF REGIONAL DEVELOPMENT

#### 3.1. Spatial factors: dynamic considerations on the regional growth process.

Although the discussion in chapters 1 and 2 was not intended to provide any hard and fast explanations for the observed pattern of economic development, it did serve to show that the overall situation in the Community is one of very unequal development at a spatial level; the less developed regions of the E.C. - almost invariably situated at the periphery - being categorised by low incomes (often a high incidence of poverty), a high share of agricultural employment, deficiencies in the industrial and service sectors, and low or lagging regional growth rates.<sup>1</sup>

This overview qualifies our definition of centre-periphery relations in the discussions that follow, and furthermore, provides the central reason for particular interest paid to regional problems and policies in parts of Ireland, France and Italy.

The present task is therefore to provide some explanation for the observed tendencies towards concentration of economic activity. For the moment we shall limit ourselves to a more general discussion of the issues involved. In the following section a formal model will be developed on the basis of which we will be in a better position to analyse policy implications.

---

<sup>1</sup> The 'standard' migration measure (not mentioned here) must by now have lost much of its significance due to problems of interpretation - see back, chapter 1.

In the first place, certain pressures leading towards the polarisation of economic activity may result from external economies and economies of urbanisation. The former derive from firms in the same or related sectors establishing in the same area. Such benefits take the forms of (i) a specialised and skilled labour force; (ii) a better provision of specialised auxiliary services; (iii) minimisation of transport and information costs with regard to supplier firms. Economies of urbanisation (or agglomeration) are more general and relate to the size of the agglomeration and the level of different services or related activities that are available. These include for example (i) accessibility to a large pool of labour<sup>1</sup>; (ii) availability of general services e.g. banking, accountancy; (iii) greater scope for the division of labour and effective separation of activities<sup>2</sup>.

Secondly, there are strong arguments to suggest that once economic activity becomes concentrated in a particular area or areas<sup>3</sup>, it will remain there. The important and growing share of replacement investment in total in-

---

<sup>1</sup>It is enough to think of a simple example. Assume unemployment averages 5% and a firm is looking for a new location for a plant with say, workforce of 500 employees. In a town with a workforce of 50,000 there would be an ample reserve of skilled and unskilled to choose from i.e. (circa 2,500). In a town of 10,000 (i.e. circa 500 unemployed), it would probably be necessary to attract skilled labour from other firms and activities and this would possibly involve paying higher wages.

<sup>2</sup>See W. Isard (1956), *Location and Space Economy*, Cambridge, p. 182.

<sup>3</sup>Clearly this depends on the nature of the spatial system, that is whether it is largely polycentric (West Germany) or monocentric (France).

vestment<sup>1</sup> constitutes one of the main reasons for reduced flexibility in the spatial pattern of economic activity. If a firm has to reinvest it is likely that it will do so on the spot where the original investment took place. Furthermore, both micro and macro studies suggest that when a firm has to move, distance from the original location is minimised as far as possible<sup>2</sup>. The point here is, that it is really only net new investment which is potentially mobile, and which regional policy can effectively influence. Given present low levels of net investment in many countries of the E.C. we are unlikely to see any important shifts in industrial location in the near future.

Thirdly, as has been pointed out<sup>3</sup>, industrial and related economic expansion in central areas has, in the past proceeded at relatively low private costs because of the lack of effort to charge producers and consumers appropriately with the net social costs of further expansion. As a consequence, the degree of economic concentration in western Europe (and the level of labour migration that accompanied it) continued unhindered at socially sub-optimal levels. Movement of work to the workers, or investment and expansion in peripheral regions was retarded by the downward pressure on wages at the centre brought about by a large and flexible supply of migrant workers. At the periphery, a source of migrant labour,<sup>4</sup> there were undoubtedly some benefits in the form of remittances from migrant workers. However, the importance of these flows should not be exaggerated -- in the

---

<sup>1</sup>This averaged 40% in 1972, 51% in 1975 and 48% in 1979 (EUR 9). SOEC National Accounts Aggregates 1960-79.

<sup>2</sup>See studies and references in Chapters 5 and 6.

<sup>3</sup>M. Streit (1974), p. 279-282.

<sup>4</sup>However we should distinguish, i) where migrant workers come from the E.C. periphery, and, ii) where they come from 'outside'. The effects on the 'core' and on the 'periphery' may be rather different in the two cases (see esp. Ch. 10).

Italian case they amounted to 171,400 million lire in 1972<sup>1</sup>, that is around 1% of regional income. Against this one should somehow balance the cost to the region in terms of loss of human capital -- a point which is rarely mentioned in discussions on migration.

However it is worth noting that in the past, recognition of this problem has tempted some governments to devise plans to recover these losses in some way<sup>2</sup>.

It is indeed strange that such costs are so easily avoided by the regions which make use of migrant labour -- they receive workers without paying for the initial costs of development and education, and furthermore manage to largely avoid unemployment costs in periods of recession by sending the workers back to their country of origin<sup>3</sup>. Such factors can only serve to promote the concentration of economic activity and maintain the competitive advantage of central regions through low labour costs and ready adjustment to adverse movements in the business cycle<sup>4</sup>.

Having discussed some of the factors which may lead to and perpetuate the spatial concentration of economic activity to the detriment of the outlying areas, we should now move on to consider the process in a more dynamic framework. To begin with we may briefly outline a number of theories concerning centre/periphery relations and associated development.

Whilst on the one hand there appears to be no great

---

<sup>1</sup>Ufficio centrale per l'Emigrazione Italiana, Roma, Paper No. 4, 1974 -- "la distribuzione regionale delle rimesse", G. Lucrezio.

<sup>2</sup>For example, the Indian government proposals for a passport tax in the early '70's.

<sup>3</sup>eg present W.German proposals for compensating migrant workers to return to their country of origin.

<sup>4</sup>For further discussion see chapter 10.

theoretical disagreement as to the factors which may lead to concentration, on the other, there are some very wide ranging views concerning what is likely to happen at the periphery.

In general, neoclassical theories tend to emphasise the role of market forces in achieving regional balance; increased demand for labour at the centre and interregional migration viewed as tending to put upward pressure on the wage rate and average earnings at the periphery.

Similar arguments apply to other markets. In particular, one equilibrating tendency is sometimes expected to arise from growing demand at the centre for raw materials and agricultural produce from the periphery.

However, the likely impact of this possibility should not be exaggerated since (i) relatively few industrial activities may be termed "natural resource based", (ii) although an increase in demand for agricultural products may be an important factor in the economic development of backward economies, agricultural structures at the periphery are often very poor and output is often destined for own consumption or local markets<sup>1</sup>. Given such limiting supply factors it seems probable that a large part of any increase in demand is likely to be met either through imports or from regions where agriculture is more highly developed<sup>2</sup>.

---

<sup>1</sup>For the Italian case see for example Bull(1973).

<sup>2</sup>For example between 1971 and 1978 total agricultural value added (at factor cost ) actually fell by 1.5% (constant 1970 prices) in Southern Italy. In the Centre/North it increased by 14.9%. ISTAT Boll.Mensile 1980 no. 3. See also Hirschman(1958),p. 189 for a similar view.

Theories based on factor-price-equalisation again lead to similarly ambivalent conclusions. In general labour migration from peripheral to central regions is expected to exert downward pressure on wages in the latter and upward pressure in the former. Wage differentials not equalised through labour flows are expected to lead to locational cost advantages at the periphery which will in turn induce firms to invest in such areas - tending to bring about an equalisation of regional wage levels (and returns on capital investment).<sup>1</sup>

In the first place, such arguments abstract from factors likely to have caused economic concentration in the first place. Specifically, where such concentration occurs and production is subject to external and internal economies of scale, there may tend to develop a competitive advantage in the production and provision of a wide range of goods and services. As a result, these central areas can be expected to attract complementary flows of labour and capital from other regions which, in the presence of increasing returns, may lead to a widening rather than a narrowing of competitive advantage as between regions.

If movements in regional wage rates adequately reflected such changes the problem might eventually resolve itself, at least in terms of employment, as outlined above. However, as one observer has remarked, "the dispersion in the growth of money wages as between industrial areas tends always to be considerably smaller than the dispersion of productivity movements".<sup>2</sup> If this is indeed the case, then the competitive advantage of fast-growing regions over more slowly growing regions is likely to increase over time.

In the second place, a lot depends on 'how' regional wage rates are raised at the periphery and whether such

---

<sup>1</sup> For graphical analysis and further discussion see Ch.10.

<sup>2</sup> Kaldor(1971), p.64 . It should be noted that this could arise simply from the dynamic adjustment of wage claims to productivity increases. Moreover, a comparative(static)/cont.

increases actually reflect regional changes in productivity. If such movements are due to capital inflows or improvement in local competitiveness, then regional divergence may be avoided. However, this is by no means the only possible or even the likely outcome. There are at least two alternatives;

(i) if labour mobility is greater than capital mobility, the increase in the average regional wage rate may result more from the migration of low-paid or unemployed workers than from any general increase in earnings of those employed. Moreover, population loss may tend to reduce local demand for labour through the multiplier effect.

In practice, labour would indeed appear to be more mobile than capital, and firms often tend to be reluctant to consider relocating new or existing activities at any great distance from their original or headquarters location.<sup>1</sup> Hence the need for regional incentives to induce movement of productive investment to the peripheral and less developed areas.

(ii) wage rates at the periphery may be increased through collective bargaining to levels similar to those existing in more developed high-productivity regions, such that labour markets in the former are not in fact cleared. In the Italian case for example, as one author has noted, the regional levelling of wages (1961-69) clearly exceeded productivity differences, and led to improved profitability in the North relative to the South.<sup>2</sup>

Also, whilst the average wage rate in l.d.r.'s may still remain below that in the high-productivity regions, the difference may in fact be of little or no importance as far as capital mobility is concerned. The tendency towards collective

---

cont/analysis of productivity levels and wages&salaries for the 9 E.C. member states since 1960 (at purchasing power parities) largely substantiates this observation. As a measure of dispersion, the weighted coefficient of variation was estimated at 9.4 and 14.4 for productivity between 1965-69 and in 1980, respectively. For wages & salaries the figures are 7.7 and 12.9, respectively. Between 1960 and 1964 such differences were even more marked - with c.v.'s being 10.5 and 6.7 for productivity and wages & salaries respectively. Whilst Germany, and to a lesser extent France have consistently maintained productivity levels (relative to the E.C. average) well above wages&salaries, the opposite is true of Ireland and Italy. (E.C. 'European Economy' No9, 1981 July, tabs. 7.3/.4.)

<sup>1</sup> See empirical discussion in Ch.9 vis distance factor.

<sup>2</sup> Stahl (1974); note: collective bargaining at a national level in Italy only became the rule after 1969.

(national) agreements and regional wage equalisation will probably be most felt in 'modern' and unionised sectors, such that for new firms establishing in a less developed region, regional wage rate differentials may be more 'apparent' than 'real'. As a result, there may in fact be very little net advantage in terms of wage costs from location in a l.d.r. ; and although labour availability may in some cases provide a positive incentive, the importance of this factor can be seen to depend crucially upon the existence of tight labour markets in more central industrialised regions.

Apart from the above problems, the factor-price-equalisation argument rests on a number of perfect competition and rationality assumptions which are equally open to question. For markets and producers at the centre are expected to be perfectly competitive so there exists no discrimination against firms or products from the peripheral regions and no monopolistic control over peripheral markets or producers.

From an empirical point of view these assumptions appear highly suspect. In particular, the high degree of industrial concentration within Western Europe suggests that oligopolistic rather than perfectly competitive markets are the rule, and the highly organised distribution networks of large companies (which for the major part have their headquarters in central or core regions) suggests that it is probably easier for products from central regions to find retail outlets at the periphery than vice-versa.<sup>1</sup>

Secondly, the assumption that transport costs are negligible is obviously one that depends very much on the type of product and the distances involved. The assumption is certainly tenuous concerning heavy goods industries and

---

<sup>1</sup> For an example concerning the Italian case see Seers (1979), p. 201.



certain types of agricultural produce.<sup>1</sup> Moreover, it is not just final transport costs which are important but total transport costs(including intermediate products), and it is not unreasonable to assume that in a wide variety of cases, such costs may well build up to rather sizeable levels.<sup>2</sup>

Given the possibility that, in the presence of increasing returns, trade between regions may actually serve to widen rather than narrow differences in regional growth rates, it seems clear in conclusion, that the indiscriminate promotion of factor mobility does not provide a long term solution to the regional problem. To rely on the 'equilibrating' forces of the market mechanism provides no remedy in a situation where regions are at very different levels of economic development. Whilst it is of course true that diseconomies of various types, such as congestion costs may eventually impel firms to move outwards from the centre to the periphery, these effects are likely to be of limited value for several reasons. Firstly, as we have previously mentioned and as some authors have emphasised<sup>3</sup>, the 'spread' or beneficial effects of growth will initially be stronger near the centre and it may take some considerable time before their influence is felt at the periphery.

Secondly, when firms are constrained to set up branch plants in peripheral regions, it is often the case that headquarter functions and research and development activities are retained and strengthened in the central regions. In this way, regional development patterns may show not only quantitative but also qualitative differences with adverse effects on the innovation and develop-

---

<sup>1</sup> See Bowers(ed.), Essays in honour of A.J.Brown(1979), p. 245. In the U.K. transport costs as a% of net output were found to vary from 1.72%(instrument engineering) to 13.7% for food,drink & tobacco and 15.4% for building materials. For a discussion of how spatial pricing methods may influence regional development, see Ch.6.5.3..

<sup>2</sup> Attempts at dispersing production in the U.K. motor-car industry ran into this problem.See Holland(1976).

<sup>3</sup> Richardson(1969).

ment potential of the less developed regions.

Thirdly, the process of economic polarisation may continue in spite of rather significant gaps between the social and private costs of production. When such externalities exist, a suitable tax on the use of the external diseconomy creating good would reduce, and at the limit abolish the amount of the good or factor used<sup>1</sup>. In such cases an attempt by central or regional authorities to charge producers accordingly the estimated value of the (net) marginal effect of the external diseconomy, would operate to redress locational imbalances and lead to a more socially optimal distribution of economic activity.

The general conclusion of the above discussion is that substantial government intervention may be necessary to redress the quantitative and qualitative imbalances that have been shown to be likely to result from the process of economic development. As such we may define a number of fields in which Government policy presently operates, including ; public control (including taxation) of industry in areas of high industrial concentration (e.g. deglomeration policies); public expenditure on infrastructure, expenditure as public services and income-maintenance programmes (including the general redistributive element of the central government budget); industrial and regional policy, including financial incentives to firms to locate in depressed or less developed regions, and control over locational and procurement decisions of state-owned firms. We shall discuss these alternatives in more depth in subsequent chapters.

---

<sup>1</sup>A.C. Pigou, "The Economics of Welfare", Macmillan 1924. We define an externality as the favourable or unfavourable effect of an economic agent on the economic welfare of another such agent (individual or firm) , for which legislation or custom does not permit or require the payment or receipt of a price for the benefit or harm which results from that effect.

### 3.2. A formal model of regional growth.

To establish how regional policy may effectively work to bring about a more balanced spatial pattern of regional growth, necessarily implies an examination of how such imbalances may arise in the first place. It is to this question we shall now turn.

We have already mentioned some of the factors inherent in the process of economic development which may tend to result in the persistence of long-term regional disparities, and it is now time to formalise the main arguments underlying this hypothesis.<sup>1</sup>

The main questions to be answered are ;

- (i) What is the role of regional structure in determining regional growth,
- (ii) Will regional growth rates, under given assumptions, tend to converge or diverge over time,
- (iii) What are the resulting policy implications - how may investment incentives, labour subsidies and (in the case of country groupings) exchange rate changes affect regional growth rates.

The essential features of the model may be summarised as follows:

- (i) the growth of autonomous demand determines the long run rate of growth of output to which consumption and investment adjust<sup>2</sup>. In the regional context the main component of autonomous demand is the demand for exports.

---

<sup>1</sup> The model, presented in a slightly modified form, is taken from Dixon and Thirlwall (1975), ch.10.

<sup>2</sup> ie, all investment is induced. See *ibid.*, p.208 footnote 7, for further discussion of the reasons for this approach.

(ii) The level of regional exports is determined by firstly, the relative price of exports, and secondly, the overall level of trading partners income.

(iii) The level of domestic(regional) export prices is determined by the level of money wages and the average product of labour (plus the level of 'mark-up' on costs ).

(iv) Labour productivity in a dynamic setting, is determined in part by the rate of growth of output(Verdoorn effect) and in part by the rate of autonomous productivity growth.

The above approach is clearly demand oriented and implicitly assumes that supply factors do not act as a constraint on growth. We shall return to this question shortly.

At the regional level however, this assumption, at least with respect to labour mobility, may broadly be expected to hold true. If the model were to be applied at a country level however, one might expect a number of capacity restrictions to arise. It is well known that factors are more mobile within countries than between them.

Essentially, the model presents a dynamic explanation of growth rate differences which suggests that once a region gains a growth advantage, it is likely to keep it. This occurs due to the circular and cumulative nature of the model - a high rate of growth of output induces a faster rate of growth of productivity and, other things being equal, a lower rate of increase in unit costs. This in turn leads to a faster rate of growth of exports, output and induced investment, and so on.

We shall now examine in more detail the properties of the model. The four functional relationships are outlined on the following page.

$$(1) \quad g_t = y(x)_t$$

$$(2)^1 \quad x_t = \eta(p_d)_t + \delta(p_f)_t + \epsilon(z)_t$$

$$(3) \quad p_d_t = c_t - q_t$$

$$(4) \quad q_t = \alpha + \lambda g_t$$

where,  $g$  = rate of growth of output in time  $t$ ,  
 $x$  = ..... exports in time  $t$ ,  
 $y$  = the (constant) elasticity of output growth with respect to export growth (equal to 1 if exports represent a constant proportion of output),  
 $p_d$  = rate of domestic price inflation in time  $t$ ,  
 $p_f$  = ..... foreign ....., \*  
 $z$  = rate of growth of world income\*,  
 $\eta$  = price elasticity of demand for exports,  
 $\delta$  = cross elasticity .....,  
 $\epsilon$  = income elasticity .....,  
 $c$  = cost inflation, ie. wage inflation plus the rate of change of profit mark-up on wage costs,  
 $q$  = rate of growth of average labour productivity,  
 $\alpha$  = rate of autonomous productivity growth, (a),  
 $\lambda$  = the Verdoorn coefficient\*\*

---

<sup>1</sup> This equation is an approximation of the export demand function :  $x_t = p_{dt}^\eta p_{ft}^\delta z_t^\epsilon$ . Lower case letters represent discrete rates of growth of the variables.

\* Both taken as exogenous to the region.

\*\* See annex for further discussion.

We expect  $\lambda, \delta, \varepsilon$  and  $y$  to be positive and  $n$  to be negative. Solving for the equilibrium growth rate  $g_1$  we obtain:

$$g_1 = \frac{y [\eta (c-a) + \delta (p_f) + \varepsilon (z)]}{1 + y\eta\lambda}$$

The equilibrium growth rate can therefore be seen to vary positively with  $a, p_f, z, \delta, \varepsilon$  and  $\lambda$  and negatively with  $c$ .

The condition for a disequilibrium situation\* is that  $(-y\eta\lambda) > 1$ . However, given reasonable values for the parameters this situation is unlikely although not inconceivable. For instance (various surveys at national level -- see annex) a reasonable estimate for the Verdoorn<sup>1</sup> coefficient would be around .5 and the price elasticity for exports is rarely above -2.0. However in the case of a fairly open and specialised regional economy, it would not seem unfeasible that a high price elasticity for exports combined with a growing share of exports in total output (i.e.  $y > 1$ ) might lead to a cumulative divergence from the equilibrium growth rate.

Essentially, the main use of this model lies in explaining different regional equilibrium growth rates rather than in general predicting cumulatively divergent growth rates. The key factor in this scenario is clearly the Verdoorn coefficient which reflects both the influence of economies of scale (external and internal)\* on the growth of labour productivity, and the extent to which technical progress is embodied in capital accumulation. The Verdoorn effect itself operates through the price elasticity of demand for exports. Hence, a region which gains an initial cost advantage in the production of a particular good will

---

\*See annex for further discussion.

<sup>1</sup> However, McCrombie(1981) has recently argued that the use of data subject to measurement errors may yield a regression(Verdoorn) coefficient that is biased upwards and in favour of accepting the hypothesis of increasing returns to scale. Caves(1970), has furthermore suggested that the causal link may run from productivity to output rather than vice versa (pp. 247-9), but goes on to point out that "several compelling lines of argument remain to support the proposition that fast growth of output.....encourages both an increased rate of capital formation and increased efficiency in capital formation". Ibid..

be likely to keep and expand that advantage through a higher growth of output and induced growth in productivity.

Equally important, the equilibrium growth rate can be seen to depend on the income elasticity of demand for regional exports. This suggests that the key to improving a lagging region's growth rate involves changing the regional structure of production to commodities with high income elasticities -- whether it be from agricultural to industrial production or an internal readjustment of industrial (or tertiary) structure<sup>1</sup>.

As concerns policy implications, the above model may help us to examine the role of various alternatives, such as capital and labour subsidies, or regional 'devaluations'. The question of wage subsidies is dealt with in more detail in the annex to this chapter. However, it seems clear that, at most, wage subsidies can only affect the level of employment and

---

<sup>1</sup>At a national level, it has been shown that the income elasticity of demand for imports may exert significant restrictions, via balance of payments constraints on the equilibrium growth rate. Under certain assumptions and with a built in balance of payments constraint the model may be reduced to  $g_i = \frac{x_i}{\pi}$  ( $\pi$  = income elasticity of demand for imports). It is assumed that there is no change in relative prices measured in a common currency and/or the sum of the export and import price elasticities is unity to obtain this result (Dixon & Thirlwall 1979). An application of this simple model to 18 industrial countries (1951-76) produces a striking approximation to actual growth experience. This suggests that the link between exports and growth via the Verdoorn effect may not be so important at the national level, possibly because there is very little change in relative (export) prices (à la law of one price), or that price elasticities are not sufficiently high (or have fallen in recent periods which may explain why the model is less successful for later periods -- based as it is on 1951-66 elasticity estimates. For a similar view see Cripps & Tarling 1973, p. 31). Hence at this level there may be a weaker link between the price of exports and the growth of output and productivity. However, the point remains that the structure of production and the characteristics of the goods produced, reflected in the income elasticity of demand, may exercise a large, if not the major influence on growth rates at both a regional and national level.

not the equilibrium growth rate<sup>1</sup>. Furthermore, the extent to which employment levels will increase depends critically on the extent to which such a subsidy is distributed between profits and prices (see chapter 8). The impact of capital subsidies is not readily analysed in the above model, however a few remarks may be made<sup>2</sup>. Most importantly, if the aim of regional policy is to attract new industries and produce a radical change in industrial structure and capital vintage, there may be a case for preferring capital subsidies which may have greater influence over the actual investment decision and choice of techniques.

---

<sup>1</sup> For consideration of the impact of devaluation at a national level see annex. In general however, the question of whether a devaluation could generate a faster rate of growth is somewhat open to doubt. To obtain this result one would have to assume that the rate of growth of exports is dependent on the absolute difference between domestic and foreign prices, which hardly seems reasonable. We may at most hypothesize within the context of the given model that a devaluation will lead to an overall increase in the level of employment in much the same way as a labour subsidy (again, see annex). However, somewhat outside the above framework, one might suggest that a devaluation could cause shifts in the functional relationships of the model and cause an increase in the equilibrium growth rate. This could be the case, if, for example devaluation caused a change in production towards goods with higher price elasticities and higher Verdoorn coefficients attached to their production processes. However, there seems little way of stating, a priori, whether this would be likely to occur.

<sup>2</sup> For further discussion of capital and labour subsidies, see chapter 8.



Although labour subsidies may be effective in attracting relatively labour intensive industries and exploiting the labour resources of l.d.r.s there are a number of drawbacks; firstly is the problem of how to allocate the subsidy -- if it is applied to all employment units (e.g. ex-R.E.P. U.K.) there is the risk that it will undermine structural change and tend to ossify industrial structure and output. Furthermore it is likely to be disproportionately expensive (see chapter 8). If it is based on marginal i.e. additional employment units there may also be competitive disadvantages to existing firms<sup>1</sup>, and the expense may anyway be large (for example in the Italian case, (Chs. 8 and 9)

Secondly, it is not at all clear that the encouragement of more labour intensive techniques in general, is entirely beneficial for the long-term competitive position of development areas. It may result in a "second-best" solution, with the adoption of outdated techniques and capital, discriminating against the innovative element in production and placing the l.d.r.s firmly at the latter stages of the product-cycle investment. Even worse, regions may be stuck with relatively labour intensive techniques, only to find that regional wage differentials, due to union pressurisation, subsequently decrease, tending to reduce competitive advantage more than might otherwise have been the case. In general, rationalisation and the implementation of new techniques (and products) may imply a maintenance or even reduction of the workforce, at least in the short-term; labour subsidies may only hinder such adaptation and the prospects for long-term growth.

---

<sup>1</sup>For further discussion of this point see chapter 8. Basically the problem is that whilst the decision to invest or reinvest in a development area is open to both indigenous and extra-regional firms, and the effect is (more or less) neutral, marginal labour subsidy confers a significant net competitive advantage on new firms to the area.

A number of limitations of the model, which are also important with respect to policy implications, should however be pointed out.

Firstly, given problems of defining interaction relationships between primary, secondary and tertiary sectors which may anyway differ substantially between regions, the above analysis the above analysis is probably best able to explain regional growth differences within manufacturing industries. On the other hand, as Kaldor (1966, 1970, 1971) has argued, at a regional level the manufacturing sector may have important induction effects on other sectors arising from, (i) direct effects on the demand for local raw materials, agricultural produce and service inputs, (ii) induced effects on productivity in non-manufacturing sectors due to the transfer of 'surplus' labour from such activities, and representing a net addition to the effective use of regional resources.

Secondly, it should be noted that the above model takes no account of the spatial configuration of inter-industry linkages and spill-over effects.<sup>1</sup> If a large or major share of intermediate goods must be 'imported' to satisfy export demand, any induced effects on local production may be severely restricted. Hence, it may not be sufficient to induce fast-growing industries to locate in depressed areas if corresponding linkages remain firmly outside the aided regions.

Thirdly, whilst the equilibrium growth rate can be seen to depend in part upon the rate of autonomous productivity growth - and hence to a large extent essentially exogenous factors - no specific mention is made of the factors involved. Such factors, mainly relating to supply-side aspects (eg. infrastructure), may in practice place severe restrictions on regional growth. Similarly, diffic-

---

<sup>1</sup> Recognition of this point and discussion is given in, Thirlwall (1974), pp. 8-9.

-ulty of access to capital markets (or differential interest rates to the disadvantage of l.d.r.'s) may restrict the adjustment process of output to autonomous or export demand (thereby placing restrictions on the endogenous growth of productivity - see model). Again, the existence of diseconomies of scale or urban diseconomies may affect cost and productivity, and such factors are not allowed for in the model.

Lastly, the model would appear largely unable to explain the actual performance of many of the ageing industrial regions, for example in the U.K. or Belgium. In the first place location-specific handicaps are not taken into account (eg. vis. inland steel-works). In the second place, short and medium term economic performance, particularly in capital goods industries subject to cyclical fluctuations in demand is probably better explained in terms of changes in the rate of growth of extra-regional income (that is, the second derivative), than by the growth of income ( $\epsilon(z)_t$ ) itself.

However, insofar as the model is more concerned with explaining the persistence of regional growth differences in general, than the performance of individual regions in particular, the above criticisms should not be taken as a refutation of the central argument. The line of reasoning is however at odds with the neo-classical approach to the extent that interregional factor flows can, under given circumstances, be seen to increase rather than diminish competitive advantage as between regions.

Moreover, a compromise solution taking into account some of the abovementioned supply-side factors may be adopted to provide a more balanced approach to explain the economic performance of individual regions - this is in fact the approach adopted in Part III and chapter 9.

### Regional growth and regional income.

As mentioned earlier, the above model would in general be best interpreted as predicting different equilibrium growth rates, rather than cumulatively divergent rates.

However, even if the resulting overall situation is one of constant not increasing growth rate differences as between regions, this outcome by itself is enough cause for alarm. If the l.d.r.s initially have lower equilibrium growth rates, assuming population movements are similar in all regions, this by itself is a sufficient condition for absolute and relative divergence in regional per capita incomes. In the absence of policies to modify the structure of regional output, regional income transfers and subsidies may then have to be applied at an increasing rate by central authorities, to maintain an equitable balance in regional living standards.

Already, at a national level, the MacDougal report(1977) established that public expenditure has had a considerable redistributive impact in all of the major E.C. countries. Such transfers, whilst representing only a relatively small proportion of each country's GDP (eg. 3.7% and 4.2% in the case of the U.K. and Italy respectively), were found to offset interregional income differences by a substantial amount, varying from 39% in West Germany and 31% in the U.K., to 44% in Italy and 52% in France.<sup>1</sup>

---

<sup>1</sup>MacDougal report(1977), Vol. II, p. 127 Table 2. The figures presented represent the change in Gini-coefficient of regional income inequality(i.e. regions weighted by population).

In the Italian case we may briefly point to a few indicators which highlight the quasi-fixed nature of inter-regional transfers over quite considerable lengths of time, and despite active measures to improve economic structure. The relevant figures are presented in the tables below.

Table 1.

	1965	1973	1970	1977	1970	1977
	trade/fiscal balance <sup>1</sup>	trade/fiscal balance	Total consumption as % of Gross Regional Product <sup>2</sup>		Investment as % G.R.P.	
Centre-North	-	-	73.5	73.0	19.2	15.4
Mezzogiorno	-16.2/17.0	-24.0/18.5	91.0	93.0	28.3*	22.4**

<sup>1</sup>A. Graziani & E. Pugliese (1979), p. 50. Trade balance = net exports of goods and services. Fiscal balance = (net) public expenditure, subsidies, pensions and migrants remittances. Figures derived from ISTAT, *Annuario di contabilità Nazionale*, Roma, 1975. All figures as % G.R.P.

<sup>2</sup>Both private and collective consumption. Investment and consumption figures derived from ISTAT. *Bollettino mensile di statistica* no. 3, March 1980.

\*of which around 55.7% accounted for by public administration, Cassa per il Mezzogiorno (direct and incentivated) and state-holding enterprises.

\*\*of which around 53.3% accounted for by above. Source: A. Accornero and S. Andriani (1979), p. 138.

In general there is quite a close relationship between the (net) regional trade balance and the (net) fiscal balance as shown in table 1. It is also clear that a large share of the fiscal balance must be made up of extra-regional investment from the public sector. With total consumption (1977) running at 93.0 % of G.R.P. and investment fluctuating at around one quarter of G.R.P. there is no doubt that Southern Italy continues to rely heavily on the Centre-North for resources to maintain regional living standards and levels of investment.

Furthermore, over time the net fiscal balance appears to have been steadily increasing -- from 8.6% of G.R.P. in 1951 it averaged 16.2% over the 1960s, and 19.0% from 1970-74. Similarly, the Southern trade gap also appears to be increasing, at least up to the mid-1970s.

The situation varies, of course, between regions and table 2 gives a breakdown of trade deficits for the eight southern regions from 1970-77. The most striking aspect of these figures is the consistently high level of the trade gap for the three regions with the lowest G.D.P. per capita (Calabria, Molise, Basilicata). The fiscal balance for these regions was of similar proportions and averaged 29.0% of G.R.P. between 1971-1973<sup>1</sup>.

There is an obvious logic in this, since a persistent trade deficit which is not balanced by a corresponding fiscal transfer, cannot be indefinitely covered by borrowing from the rest of the country (or elsewhere).

Furthermore, the high share of gross fixed investment in G.R.P. (up to 50% in Basilicata) suggests, (i) considerable state involvement in regional investment programmes in these areas, and (ii) that a large, and probably the major part of transfers to these three regions is in the form of public or subsidized (private) investment -- hence the correspondingly large trade gap.

---

<sup>1</sup> It is worthwhile noting that in Italy, social security payments constitute the major single component of such transfers, accounting for around 42% of total public expenditure (including investment expenditure). Southern Italy receives almost twice as much in social security payments than it contributes (Seers et al 1979, p.207)

<sup>2</sup> MacDougall Report (1977) vol.2, p.112. Not including migrants remittances.

Table 2

REGION Index GDP per capita 1970	Net trade deficit as % G.R.P.			Gross fixed investment as % G.R.P.		Index of G.D.P. per capita 1970- 1976 ( $\pm$ = $\pm$ 2% points)
	1970	1976	1977**	1970	1977	
Calabria 52	37.0	38.0	24.9	33.5	21.7	↗ ↖ ↗ ↖ ↗ ↖ ↗ ↖
Molise 58	36.6	29.2	32.5	35.2	39.7	
Basilicata 53	35.0	37.8	33.1	38.5	50.2	
Sicilia 68	25.5	24.1	25.0	30.5	21.0	
Sardegna 78	23.9	21.5	16.6	35.9	30.1	
Abruzzi 71	21.8	15.0	11.9	27.7	21.4	
Puglia 68	20.0	16.3	11.7	29.2	24.9	
Campania 68	9.1	8.6	8.4	20.3	15.3	
Mezzogiorno	20.9*	19.1	16.5	28.3	22.4	

Source: ISTAT. Boll. mensile 1980 no. 3, and E.C. Basic statistics, various.

\*The fiscal balance for this year was equal to 19.0% of G.R.P.

\*\*Whether 1977 was an atypical year or the start of a new trend will only be clear when figures for 1978, 1979 become available.

NOTE: G.R.P. = G.D.P. +/- net factor income transfer

For three of the five remaining regions (apart from Campania and Sicilia) there would appear to be a case for attributing part of the decline in the negative trade-gaps (1970-1977) to the fall in investment shares, that is, to the falling state involvement in industrial investment over the 1970s. Campania and Sicilia are the two largest regions, and one may therefore expect the link between investment and the trade-gap to be somewhat weaker, since presumably a high proportion of inputs are supplied from the region itself.

Finally, if the trade deficit for the three poorest regions (Calabria, Molise, Basilicata) can be said to reflect the extent of fiscal transfers to these regions, then

it seems clear that their relatively good performance in terms of GDP per capita, must be largely due to the subsidies themselves rather than to any process of export-led growth. On the other hand, in Abruzzi and Puglia, the trade-gap narrowed substantially but was accompanied by either stable or increasing relative levels of GDP per capita.

It may therefore be the case that whilst some regions in the South are continuously dependent on state transfers, other have been able to circumvent this process and have achieved self-sustained growth.

The preceding discussion has emphasised the relationship between economic structure and growth. However, analysis of regional economic structure can be undertaken at various levels of aggregation; from the overall view of primary, secondary and tertiary production, to an analysis of differences within each of these branches themselves. Moreover, even where economic structures may appear to be similar as between regions various qualitative or functional differences may still remain with substantial implications concerning the potential for regional growth. We shall return to consider such questions in Part III.

---



### 3.3. The rationale for regional policy.

Taking into account the various arguments put forward so far, we should perhaps at this point summarize the main arguments concerning the desirability (or otherwise) of regional policy.

At a national level the case for regional policy revolves mainly around the following considerations.

Firstly, the resource allocation argument which stresses that government intervention is necessary to internalise the negative (net) externalities brought about by the operation of the free-market mechanism, which may otherwise result in divergence between the private and social costs of production. If economic concentration continues well beyond the point that is defensible on grounds of economic efficiency and welfare maximisation, then intervention is necessary to correct the balance. Regional disincentive (or deglomeration) policy involving permit systems or taxation of new (or even existing) developments, is an example of one possible method of dealing with this problem.

Secondly, full utilisation of the economy's resources may require for its attainment, some intervention on the part of the central government.

The presence of unemployed or underutilised labour in certain regions may require government intervention to bring about a reallocation of industrial investment towards such areas. This may occur if private firms fail to react fully to market signals such as relative wages and labour availability. Furthermore, if wage bargaining takes place at a national level, as is the case in many western European countries, regional wage rates may not adequately reflect the true opportunity cost of labour and regional unemployment may result. Whether the private sector would fully react to changes in labour availability i.e. relative unemployment rates, is open to some consi-

derable doubt<sup>1</sup> -- even if labour supply constraints force firms to move from central areas it is likely that alternative locations will be found without the need to undertake long-distance moves to the peripheral areas.

The third main argument for regional policy partly derives from the abovementioned factor utilisation problem, and concerns the transmission of wage inflation. There would appear to be some empirical support for the argument that wage-inflation is largely determined in regions which face a relatively high pressure of demand, that is the low unemployment areas<sup>2</sup>, and transmitted at the sectoral level to the high unemployment regions. According to this view, a diversion of jobs from the central, low unemployment regions to the peripheral areas, may be accompanied by macroeconomic policies to restore the overall pressure of demand at a lower overall level of unemployment and higher level of aggregate output (inflation rate unchanged). Hence there is a net production gain to the economy as a whole. This occurs because (i) there are underutilised factors at the periphery (which, as we have seen tend to be high unemployment areas) which are brought into use; and (ii) as a result of relieving pressure of demand at the centre, a reduction in the overall rate of wage inflation may be possible.

It should, however, be recognized that the above argument is mainly valid in periods of fast growth where factor shortages at the centre may produce inflationary tendencies in the economy as a whole. Where unemployment is also running at high levels in central areas (as is presently the case in many countries of the E.C.), it seems clear that there will be fewer benefits of the type mentioned above to be drawn from redistributing production and employment to the high-unemployment areas. The problem is then one of the overall level of aggregate demand rather than its spatial distribution.

---

<sup>1</sup>As far as the present author is aware, there is no empirical evidence to suggest that differences in regional unemployment rates have any general influence on the location of manufacturing investment (see chapters 9 and 10).

<sup>2</sup>Mackay & Hart(1975). This question is discussed in more detail in the annex to chapter 9.

The fourth argument in favour of regional policy relates to welfare and social considerations. Even where regional income disparities may be reduced through factor mobility, the social costs resulting from labour migration on a large scale may be so great as to rule out the desirability of this option as a long-term solution to the regional problem. Furthermore, if we include as a regional welfare measure, accessibility to public goods and services (hospitals, schools, public transport etc.) and private services it can be seen that population decline resulting from migration may lead to a considerable welfare loss for local communities as a result of falling levels of provision of such services.

This is particularly relevant for the peripheral regions where population is often widely dispersed. In such cases, given that there are economies of scale in the provision of public services, a decline in the local population would tend to increase per capita public costs and lead to the choice between higher local taxation or a reduction in public services -- in either case leading to a reduction in regional welfare.

The above arguments supporting the pursuit of active regional policies may also be applied at the level of the E.C. as a whole. Here, however, we must distinguish two lines of argument; firstly, the case for a coordinated regional policy at the Community level; and secondly, the case for an increased allocation of funds (broad definition of r.p.) at this level. How the various E.C. funds actually operate and their official "raison d'être" will be discussed in a later chapter.

Perhaps one of the main considerations for a Community regional policy relates to political and social cohesion of the group. To quote the Thomson Report<sup>1</sup>, "No Community could maintain itself nor have a meaning for the peoples which belong to it so long as some have very different standards of living and have cause to doubt the common will of all to help each Member to better the conditions of its people."

---

<sup>1</sup> E.C. (1973), Report on the regional problems in the enlarged Community, p. 4.

Equality of opportunity is seen as a related concept in this respect, specifically, "if capital is not moved towards the less developed regions in order to enable labour to find employment in conditions which are comparable to those existing in the regions of greater development, workers will not have a real choice on which the free circulation of labour in the Community can be based."<sup>1</sup>

Following from this line of argument we may specify the following main reasons for a Community regional policy:

- 1) To ensure an equal distribution of long run benefits and opportunities from the economic development of the Community. Especially relevant here are the dynamic implications of the integration process which may be of a general nature (income disparities, unemployment) or specific to certain sectors (eg. steel), and it may be desirable to avoid some regions being seen to gain at the 'expense' of others.
- 2) To ensure compatibility and consistency with other Community policies. This may consist of either (i) mitigating the adverse regional effects of certain other E.C. policies or (ii) ensuring that regional policies in the Member States are consistent with the overall objectives of the group, particularly with regard to competition policy.
- 3) Controlling the possible escalation of regional aids which could result from "outbidding" between countries for available international investment. Guidelines and maximum levels of financial assis-

---

<sup>1</sup>Ibid., p. 4.

tance may be useful for this purpose, although there are notable difficulties with comparing the effective value of different incentives.

Apart from the above questions there are also a number of additional reasons why a Community policy should be to a large degree additive to existing financial aids rather than just a coordination of national policies;

- 4) A Community policy should supplement national regional incentive policies. It is a rather obvious (but not often stated) fact that the worst off members of the E.C. are in the least advantaged position to provide the necessary resources to follow active regional policies (Ireland and Italy). Indeed in the case of Ireland (and certainly Greece) it is not unreasonable to consider that the whole country, or a very large part of it, should be covered by regional incentives, in which case there may be some justification for the Community to undertake a large or even majority contribution to (national) regional policy expenditure.
- 5) To help overcome bottlenecks to regional development which may occur at a national or international level. Particularly obvious examples could be lack of provision of general infrastructure and lack of available investment capital (for example due to imperfect capital markets). For example the major role of the European Investment Bank may be seen as the provision of finance for certain (industrial investment) projects which may have difficulty in raising funds elsewhere<sup>1</sup>.

---

<sup>1</sup>E.I.B. loans are independent of the riskiness or location of the project. The other major advantage of the E.I.B. is its role in channelling back capital which may have been siphoned off in the form of savings from the l.d.r.'s.

Other types of approach are also conceivable in this respect. Two examples could be (i) joint Community projects with regional implications and (ii) joint policies with respect to the location of leading multinational firms in key sectors<sup>1</sup> (although the latter may not have financial implications).

In conclusion, the role of E.C. regional policy must be seen in the light of persistent and (under some measures) widening regional welfare disparities over the 1970s. This in itself provides a strong case for the continuation and reinforcement of Community regional policy in the 1980s.

As we have mentioned, the possible adverse effects of integration (large-scale labour and capital flows, polarisation of economic activity) are one of the main reasons for a Community policy per se. Insofar as it can be said that such problems are likely to increase and change in nature as the degree of integration increases, it is clear that the nature and scope of Community regional policy will have to adapt. By this we mean that the appropriate type of regional policy, in the broadest sense, will depend on the level of integration undertaken. In general, the transition from Customs Union to Monetary Union can be visualised as accentuating the integration problems we mentioned earlier. This occurs mainly because governments no longer have the power to adjust exchange rates to compensate for adverse movements in efficiency wages. Furthermore, discipline imposed by fixed exchange rates on national monetary policies may pose severe adjustment problems for the weaker members. Recognition of this fact is shown by the arrangement to provide Italy and Ireland, on their joining the E.M.S. in 1979, with loans of up to 1,000 million EUA per annum (for five years at 3% interest discount) to strengthen their infrastructure and industrial

---

<sup>1</sup>See for example S. Holland(1976), Chapter 8.

base.

The final point we should make here is that, in the long run, if the Community is going to become fully integrated, its finances and budget will have to play a role similar to that in national integrated economies, where public finance operates to even out, to a very significant extent, regional differences in incomes and living standards.

In this sense, full economic union can be seen as an essential follow-up to monetary union. The importance of interregional transfers within all the Member States of the present E.C. bears witness to this necessity, and the European Community itself is hardly likely to be an exception.

---

## ANNEX 1

It should be kept in mind that the Verdoorn relation by itself does not explain differences in regional growth rates. It is a source of such differences to the extent that (i) initial differences exist with respect to other parameters or variables - in which case the Verdoorn effect serves to exaggerate such differences ; (ii) the Verdoorn coefficient varies between regions (other factors equal).

It is at the basis of models of 'cumulative causation' in the sense that once a region obtains a growth advantage (for example due to a high income elasticity of demand for exports), the Verdoorn effect ensures that the region will maintain it.

As regards the value and statistical significance of the Verdoorn coefficient, most empirical studies have yielded estimates of between .4 and .64 (for various countries and periods).<sup>1</sup>

Using regional data for the U.K., (1958-68), Dixon & Thirlwall (1975), estimate a coefficient of .512 which is significant at the 99% confidence level. From their regional estimates the above authors conclude that " just under one half of the rate of technical progress and capital deepening combined must be autonomous, and just under one half induced by the growth of output".

From whatever viewpoint, it is hard to deny the significance of the Verdoorn relationship. Specifically, for the value of the coefficient to be zero, one would have to assume, (i) constant returns to scale, and (ii) that technical progress and capital deepening were strictly autonomous.

<sup>1</sup> See especially : - P.J. Verdoorn, "Fattori che regolano lo sviluppo della produttività del lavoro".  
L'Industria, 1949.

- N.Kaldor, "Causes of the slow rate of economic growth in the U.K." 1966.

- W.Beckerman, "The British economy in 1975".

- K.A. Kennedy, "Productivity and industrial growth", 1971.

- Cripps & Tarling, "Growth in advanced capitalist economies 1950-70", CUP 1973

The importance of internal and external economies has recently been confirmed in a study of the regional and sub-regional impact of these factors on the performance of manufacturing establishments in the U.K. (Townroe and Roberts 1980). Cross sectional regression analysis relating size of plant to various measures of efficiency and performance provided significant coefficients for the majority of sectors in manufacturing industry. Concerning external economies the availability of specialised services and skilled manual labour recorded positive and significant coefficients for a wide range of industries. There was however some indication that size of agglomeration may have resulted in diseconomies for particular sectors, (ibid. pp. 163-167).



- (1)  $g = y(x)$
- (2)  $x = \eta(p_d) + \delta(p_f) + \varepsilon(z)$
- (3)  $p_d = c - q$
- (4)  $q = a + \lambda g$

note:  $\lambda, \delta, \varepsilon$  and  $y > 0$                       see text for definitions.  
 $\eta < 0$

The equilibrium growth rate  $g =$

$$(5) \quad g = \frac{y [\eta(c-a) + \delta(p_f) + \varepsilon(z)]}{1 + y\eta\lambda}$$

We wish to consider the growth rate in disequilibrium and discover what conditions determine whether we have convergence to or divergence from the equilibrium growth rate.

Method : specify exports in time  $t$  as a lagged function of its determinants, ie,

$$(6) \quad x_t = \eta(p_d)_{t-1} + \delta(p_f)_{t-1} + \varepsilon(z)_{t-1}$$

Combining (6) with the original set of equations, and assuming the rate of growth of the exogenous variables to be constant, gives the first order difference equation,

$$(7) \quad g_t = y [\eta(c_{t-1} - a) + \delta(p_f)_{t-1} + \varepsilon(z)_{t-1}] - y\eta\lambda (g_{t-1})$$

The general solution to which is :

$$(8) \quad g_t = A(-y\eta\lambda)^t + \frac{y [\eta(c_{t-1} - a) + \delta(p_f)_{t-1} + \varepsilon(z)_{t-1}]}{1 + y\eta\lambda} \cdot (1 - (-y\eta\lambda)^t)$$

Where  $A$  is the initial condition.

Hence, the behaviour of  $g$  is determined by the value of  $(y\eta\lambda)$ , (note : since  $\eta < 0$ , then  $(-y\eta\lambda)$  will be  $> 0$ ). The condition for cumulative divergence is that,

$$(-y\eta\lambda) > 1$$

To show the effect of wage subsidies and currency devaluation on the equilibrium growth rate, let the price of domestic exports in terms of the overseas currency be  $P_0$ , then,

$$\begin{aligned} P_{0t} &= P_0 t \times \text{exchange rate} \quad \text{or,} \\ (9) \quad p_{0t} &= \theta_t + p_t \end{aligned}$$

Where  $p_{0t}$  = the rate of change of home prices expressed in overseas currency in time  $t$ .

$\theta_t$  = the rate of change of the exchange rate in time  $t$ .

$p_t$  = the rate of growth of prices in domestic currency in time  $t$ .

Expressing the domestic price in terms of the overseas currency, equation (2) becomes,

$$(10) \quad x_t = \eta(\theta_t + p_t) + \xi(z_t) + \delta(p_{ft})$$

and the equilibrium growth rate is,

$$(11) \quad g_t = \frac{y [\eta(\dot{c}_t - a + \theta_t) + \xi(z_t) + \delta(p_{ft})]}{1 + y\eta\lambda}$$

Partially differentiating (11) with respect to  $\theta$  gives,

$$(12) \quad \frac{\partial g}{\partial \theta} = \frac{y\eta}{1 + y\eta\lambda}$$

and with respect to  $c$  gives,

$$(13) \quad \frac{\partial g}{\partial c} = \frac{y\eta}{1 + y\eta\lambda}$$

Hence,  $\frac{\partial g}{\partial \theta} = \frac{\partial g}{\partial c}$  which shows the equivalence of wage subsidies ( $c$ ) and devaluation ( $\theta$ ) on the growth rate.

However, the effect of a currency devaluation or wage subsidy on the rate of change of money wages or the exchange rate is once and for all.  $\theta$  and  $c$  become zero in subsequent periods.\* In

---

\* This analysis is admittedly oversimplified for purposes of exposition. In particular one might argue that  $c$  and  $\theta_t$  are interdependent. On the assumption that a change in the exchange rate has no effect on inflation (ie.  $c$ ), we have  $dc/d\theta = 0$ , and the analysis is as outlined above. If however we take a monetarist view, ie.  $dc/d\theta = -1$ , a devaluation will have no lasting effect on the level of output or employment. In this case a wage subsidy would appear more effective. However, as we shall see later, the effectiveness of a wage subsidy depends crucially on its distribution between profits and prices.

order to have a permanent rise in the growth rate by either of the abovementioned methods, we would need to postulate that the rate of growth of exports is determined by the absolute difference between domestic and foreign prices. Beckerman<sup>1</sup> has suggested an additive function, but does not give a full explanation of the process involved. Indeed, in its present form, our model would suggest that diverging regional growth rates would only be possible if the determinants of the equilibrium rates were themselves time dependent. This could occur if, for example, price or income elasticities of demand changed over time with changes in the structure of production.

It should be emphasised, however, that a devaluation or wage subsidy will have a permanent effect on the level of employment. This is simply due to the once and for all increase in the level of output in the initial period. Although the growth rate reverts to its equilibrium level in subsequent periods, it does so from a higher level of output and therefore employment. Furthermore, a regional wage subsidy may have an additional impact on employment by inducing the use of more labour intensive techniques.

Finally, it should be made clear that stable growth rates may lead to continuous regional divergence, and this is serious enough in itself. If the low income regions also have a lower equilibrium growth rate, then we will have both absolute and relative divergence in regional incomes. Even if growth rates are equal, divergence in absolute terms will occur. Furthermore there is good reason to believe that the former case is more likely in the absence of effective regional policies, since a higher proportion of output in low income regions is invariably made up of agricultural products, for which price and income elasticities are generally very low.

Although productivity and price factors do indeed play an important role in our model, the absence, in particular, of the income elasticity of demand in previous authors works undoubtedly explains their over-preoccupation with relative prices and exchange rates. The importance of the present approach is that it emphasises the role of structural factors; in particular the nature of export specialisation and the income elasticity of demand for exports.

---

<sup>1</sup> W. Beckerman "Projecting Europe's Growth" E.J. 1962



## C H A P T E R     F O U R

---

### European centre-periphery relations in the context of European integration.

---

It goes without saying that any substantial study of regional development in Europe would not be complete without some discussion of the integration process and its regional impact. Furthermore such analysis is indispensable if one wishes to fully understand the precise nature of the regional problem in Europe and the forces at work.

In this section we consider how the establishment of a Customs Union may affect the location of industry and accentuate existing tendencies towards specialisation in production. This in turn raises the question of what impact these events are likely to have on the spatial distribution of regional growth and employment.

#### 4.1.

#### Location theory and economic polarisation.

During the 1960s the main concern was clearly over the customs union issue. The analysis was generally based on standard concepts of location theory.

In the Giersch<sup>1</sup> model for example one assumes a homogeneous economic space with regard to population, resources and cost levels. To illustrate the model we assume that a firm supplying the entire market for a particular good within this economic space finds it economic to do so from a single plant in the centre of the market. (We are therefore assuming that the economies of scale in single plant production outweigh the reduced costs of transportation which might result from dispersed production and plants in other parts of the area.)

The addition of a second firm in this case does not substantially alter the analysis since both firms are likely to find a central location preferable, each supplying one half

---

<sup>1</sup>Giersch H. (1950), "Economic union between nations and the location of industries", R.E.S., vol. 17.

of the market (see Hotelling<sup>1</sup>).

In this simple framework one can analyse for example the impact of a customs barrier in a two country firm model.

Under free-trade the optimal location for both firms in the industry might well be situated on the border between the two countries (assuming for example that each country constitutes a hemisphere of such a homogenous economic space). The introduction of a customs barrier will then decrease the market radius for each (national) firm and both firms will move away from the frontier to more central (national) locations.

The opposite occurs when two countries join a customs union and one would expect the pattern of location to approach the frontier zone.

The fact that the basic assumptions of the analysis with regard to homogenous economic space, are not seen to exist in reality, rather serves to increase the usefulness of the model, in the present context. Given the existing concentration of population and markets in the E.C. the effect of a customs union may be visualised as speeding up and accentuating the process of polarisation towards the centre. Gradually the importance of national markets would be replaced by a European market and firms would come to prefer locations near the centre of the E.C.\*

Correspondingly, the regions at the periphery would become even less attractive. Their economic distance from the new 'centre' being greater and not being able to offer the attractions of a large market.

Support for this argument comes from a study on 'economic potential' in Europe by Clark, Wilson and Bradley (1969)<sup>2</sup>.

<sup>1</sup>"Stability in competition", E.J. 39, 1929, pp. 41-57. For a different approach see also N. Devletoglou(1965), "A dissenting view of Duopoly and spatial competition", Economica 32. A more up-to-date analysis is provided in a subsequent section. Location theory is very broad and we have chosen to limit our present discussion to a simple analysis of the salient points i.e. a reduction in tariff barriers.

<sup>2</sup>Regional Studies vol. 2, 1969. \* that is, abstracting from any internalised costs of agglomeration(seeon).

Clark et al make use of a 'gravity' model in which the economic 'potential' of any region is arrived at through the summation of incomes in the remaining regions, each being first divided by the hypothetical 'distance' costs of reaching it. Distance costs in this context are measured as transport costs by the most economical route. Other studies however, have preferred to adopt an absolute measure of distance as a more general indicator of other locational influences (eg. E.C. 1981). In either case, the economic potential of a region is intended to measure factors such as its capacity to act as a supplier of inputs and its desirability as a market for final products. In the Clark study economic potentials before the Treaty of Rome (1950-1960) and over the period 1960-1965 were compared, and it was clearly established that increases in regional economic potential were positively correlated with changes in regional manufacturing employment in expanding sectors. In the peripheral regions (S.West France, S. Italy, N. Germany) employment either declined or grew more slowly in 1960-1965 than in the earlier period.

More recently, another study on economic potential in the E.C.<sup>1</sup> came to the conclusion that the gap in relative accessibility between the most central and peripheral\* regions widened further over the 1960's and early 1970's.

At the very least, the above findings would certainly appear to indicate quite clearly the existence of forces tending towards economic polarisation, and the probable link with the process of integration.

We should however make two qualifications, both related to factors which might limit the polarisation process.

Firstly, it is conceivable that growth at the 'centre' could eventually run up against labour supply constraints which would force firms to seek out alternative locations. This however does not appear to have presented a real problem so far for most countries of the E.C. mainly due to a large and flexible supply of migrant labour. In the second place, urban diseconomies may eventually induce firms to move away /cont.

---

<sup>1</sup> E.C. "The regions of Europe-1st periodic report", 1981, p.61.  
 \* Mainly, Southern and central Italy, S.W. France, Ireland and some U.K. regions.

from the most central areas. However, the importance of this phenomenon is probably much less at the periphery, since, in practice, when firms move, distance from the original location is often one of the main factors involved. In other words, rather than negating the concept of the 'centre' recent trends would tend moreover, to point to its gradual enlargement. A further problem which is worth considering, is that the greater level of competition induced by the integration process may have unfavourable effects on firms at the periphery.

It is well known that firms in l.d.r.'s are on average much smaller than competitors in m.d.r.'s and are therefore less able to reap the benefits of scale economies in production or large scale distribution.

Furthermore, Holland (1976) has argued that dominant firms from m.d.r.'s may actively encourage the decline of small scale competitors in certain markets by using 'no entry' or 'limit' pricing techniques. What the precise magnitude of such effects may be is obviously a difficult question to answer.

Hence, the integration process may have a twofold effect on the periphery; firstly with the reduction in tariff barriers, industrial location near the European centre may become more profitable; secondly, by promoting concentration and the development of transnational, European-market oriented companies<sup>1</sup> with already substantial market power, integration may also result in the undesirable elimination of firms which remain in the national or local market.

We shall deal with these questions in turn, and in subsequent sections we shall examine how the growing dominance of large-scale enterprise in international trades may be seen to have important repercussions on the economic development potential of the peripheral regions.

---

<sup>1</sup> See, E.C.(1980), Ninth Competition Report, p.141.



#### 4.2.

The previous sections have placed considerable importance on the theoretical underpinnings of the relationship between regional structure and regional growth. The purpose of the following four sections is to relate this "structure-performance" paradigm to the economic actuality of the 1980s. An analytical framework of reference is therefore needed and we shall now proceed to outline the main issues involved.

#### The changing nature of the (E.C.) regional problem:

During the 1960s and up until the early 1970s, the efforts of regional policy mainly centred around attracting new firms to the depressed areas with the general aims of improving employment opportunities and industrial structure.

However, the general decline in net new investment in the late 1970s<sup>1</sup> -- more pronounced in some countries than in others -- has led to a sharp decline in industrial mobility<sup>2</sup>, often reflected in a falling number of cases coming up for national regional aids. In a number of countries such aids have been increasingly used to prevent the closure of firms and the reduction of industrial employment.<sup>3</sup>

Under these circumstances regional policy must be increasingly directed towards indigenous firms located in the development areas. For these purposes, straight financial

---

<sup>1</sup>In real terms (constant 1975 prices), net new investment in the E.C.(9) has been lower in every year from 1975-1979 (inclusive) than in every year from 1970-74. Furthermore the share of replacement investment in total investment has constantly increased -- hence there is a greater tendency for what investment there is to remain on the spot of the initial investment. Source: Eurostat-National Accounts ESA-Aggregates(1981).

<sup>2</sup>In the U.K. the fall off in industrial movement was especially noticeable after 1970(Ashcroft 1978). In France, de-centralization from the Paris region(no overall figures available) fell sharply after 1972(Tuppen 1980).

<sup>3</sup> See chapter 8.

incentives may not be enough, as the problem is likely to be more complex than it may seem at first sight. If the aim is to develop the growth potential of indigenous firms and their ability to adapt to sectoral structural change, more attention must be paid to their capacity to adopt product and process innovations.

Whilst in the 1960s the competitive advantage of many assisted areas was to be found in the low cost and availability of labour, and the key bottlenecks were those of general infrastructure and investment capital, the present situation is somewhat different. In many cases wage differentials as between regions have narrowed considerably as a result of union pressures\*. Infrastructure has been steadily improved by concentrated efforts on the part of national governments. The main restrictions on regional growth are now more likely to be the lack of indigenous innovation and adjustment potential on the part of the less developed regions, as reflected in certain well-defined qualitative spatial disparities<sup>1</sup>.

#### The determinants of regional innovation and adjustment potential:

Regional innovative capacity may be divided into general characteristics and firm-specific characteristics. Obviously there is some interconnection between the two, but for the purposes of exposition we shall treat them in this order. In practice it will be necessary to consider separately, (i) the potential of indigenous small and medium-size firms, and (ii) the impact of multiregional (MRE) and multi-

<sup>1</sup>In this respect we may point to a number of studies relating to the employment impact of regional policy in the 1960s and early 1970s. In many cases it was found that the major employment effect of r.p. arose through firm movement to the development areas rather than improved performance of indigenous firms. See for example vis. Scotland, Moore & Rhodes 1974 (S.J.P.E. Vol. 21, p. 227), vis U.K., Mackay & Thomson 1979 (S.J.P.E. Vol. 26, p. 252), vis Italy (chapter 5 of this volume) vis Ireland (I.D.A. 1977 Annual Report); vis France, the case is somewhat unclear (but see chapter 8). \* eg. Italy (see back, Ch.3.1.).

national (MNE) enterprises on local development and adjustment potential. Again however, the classification is not complete since external control not only relates to branch plants but also, in general, to a large number of supplier firms -- hence the concept of external dependence may include a large number of "linked" indigenous firms which are not truly "independent" in the above sense.

#### General determinants of regional adjustment and innovation potential

A number of factors external to the firm itself and related to general locational advantages/disadvantages may be listed under this heading;

- the quality of the regional labour market (skill and educational levels, age structure)
- the technical capacity and adaptability of local supplier firms
- the general availability of related business services
- the existence of good communications and information networks (proximity to final markets may also be an important factor here)
- availability and cost of risk capital.

#### Firm specific characteristics

These factors relate to the type of firm considered and the qualitative intra-firm characteristics for given firm types.

The adaptive and innovative capacities of a given region may be limited by the nature of its firm structure, particularly if the latter is dominated by, (i) small firms, oriented to local markets and "traditional" products; (ii) supplier firms, linked to the demands of larger enterprises; (iii) branch plants of MREs or MNEs, where standardised production is prevalent.

The above firm types and their adaptive and innovative impact on the regional economy may be further subdivided into a number of intra-firm factors. Thus the following considerations may be borne in mind when analysing regional enterprise structure:

- rates of job and firm turnover
- type of product; degree of standardisation or differentiation: semi-finished, component or finished manufacture
- type of production process; capital intensity<sup>1</sup>;
- use of R & D, measured directly by in-house spending and reflected in product and process innovation;
- skill and employment structure of regional enterprises; this will also tend to reflect qualitative aspects of production;
- organisational factors; quality and style of management, degree of decision-making autonomy and decentralisation of headquarters (vis branch plants). A measure of the latter may be obtained by examining the extent of external control of regional enterprises and the degree of centralisation of headquarters functions of MREs.

Furthermore, several inter-firm characteristics may be relevant in this respect, notably:

- overall industrial structure and concentration, may have a number of implications for other firms operating within the same region and sector. Although as we have seen, regional economies are generally highly open, and this may, to a large extent, mitigate competitive distortions, certain spatial problems may nevertheless arise. This may be the case where (i) indigenous and new firms compete in local markets and (ii) where they compete for specialized

---

<sup>1</sup>It is generally recognized in the context of "dual" economies that firms producing essentially the same product may exhibit markedly different capital/labour ratios in the production process. Although difficult to quantify at the empirical level, the theoretical implications regarding economic development (at micro and macro levels) have been analysed by Lutz (1962) and Bull (1978). A fuller discussion is not, however, within the scope of this paper.

and skilled labour<sup>1</sup>;

- the extent of inter-industry linkages within the region, and the extent to which such linkages promote technical innovation and diffusion of new products and processes (with resulting spin-off benefits for supplier firms);
- the extent to which indigenous firms have recourse to local business services. Demand creates its own supply; the range of business services available<sup>2</sup> to small firms in peripheral regions is often limited<sup>2</sup> which is at once both the cause and effect of lacking market research and product development on the part of indigenous industry<sup>3</sup>. The degree to which new establishments place their service demands locally may therefore be an important factor in developing a broad business service sector resulting in beneficial spin-off effects on smaller firms for which such services may present major bottlenecks to the growth and development of the firm.

The above analytical framework has, of necessity, been brief and many of the elements will be taken up in more detail in the sections which follow. The most we can hope for, however, given numerous statistical limitations, is a general overview of the salient points and possible implications, rather than any detailed analysis. In the following chapter we shall therefore attempt to examine at a regional level the following indicators of innovation and development potential;

- (i) Firm size structure, ownership and implications for the regional economy
- (ii) The spatial and sectoral distribution of research and development activities.

---

<sup>1</sup>As a general rule, it has been suggested that new enterprises should not employ more than 10% of the labour force in any catchment area. Atelier de Recherche et d'Etudes d'Aménagement (AREA), "La vie rurale dans le bassin Parisien", Paris 1970.

<sup>2</sup>Ewers & Wettman (1980), p. 177. Often to tax consultant and non-specialised lawyers.

<sup>3</sup>J.N. Marshall (1979), p. 556.

- (iii) Qualitative aspects of regional employment
- (iv) A case study of differences in sectoral structure as between regions
- (v) An analysis of the business service sector as a bottleneck to innovative capacity.

As we have mentioned, it will be necessary to make the conceptual distinction between indigenous enterprises and externally owned branch plants and subsidiaries. The reason being that with regard to the latter, the corporate headquarters and therefore the decision-making factors upon which innovation and adaptability depend, will to a greater extent be external to the region itself.

At a more fundamental level, the current preoccupation with such issues should be fairly clear; whilst manufacturing employment was expanding, and being effectively diverted to the development areas, the net addition to employment levels in these areas was considered all well and good. With the advent of static or declining levels of manufacturing employment, and the need for increasing structural adaptation, more emphasis must be put on qualitative aspects of regional development.

More precisely, it may be asked whether the transfer of productive capacity to the l.d.r.s that occurred over the 1960s and early 1970s, in the form of branch plants and subsidiaries, will have long-lasting repercussions on the development potential of these regions.

Furthermore, in the context of integration and the international division of labour, one should consider the likely impact of subsequent developments on the overall strategies of multiregional and, especially, multinational enterprises. Since one characteristic of assisted areas is often the high level of external control of regional enterprises this question is clearly of some importance. The

growth strategy of such corporations is relevant not only insofar as concerns locational decisions, but also with respect to questions related to input and output markets (vertical and horizontal growth) and market dominance. Such factors will also depend on the external macro-economic and international environment. Specifically, whilst the rapid expansion of markets in the 1960's led to the proliferation of branch plants in l.d.r.'s, largely for standardised production, the contracting market conditions of the late 1970's and 1980's may, (i) result in the closure/scrapping of branch plants in these areas, or (ii) lead to horizontal takeovers of competitors in similar markets. One should therefore consider the competitive aspects of MNE's and MRE's growth strategies at a spatial level, and this point will be taken up in more detail in Chapters 6 and 7.

---





BIBLIOGRAPHY

- Isard W. (1956), "Location and Space Economy", Camb.
- Streit M.E. (1974), "Problems and perspectives of regional development in Western Europe", Zeitschrift für Wirtschafts und Sozialwissenschaften, Berlin, 1974.
- Hirschman A. (1958), "The Strategy of Economic Development", Yale U.P..
- Kaldor N. (1971), "The dynamic effects of the Common Market", in, D.Evans, op.cit.
- Stahl H. (1974), "Regionalpolitische Implikationen einer EWG Währungsunion", Kieler Studien, Tübingen.
- Seers D.(ed.)(1979), "Underdeveloped Europe - studies in core-periphery relations", Harvester.
- Bowers (ed.)(1979), "Essays in honour of A.J. Brown".
- Holland S. (1976), "Capital versus the Regions", Macmillan.
- Dixon and Thirlwall (1975), "Regional Growth and Unemployment in the U.K.", Macmillan.
- McCombie J.S. (1981), "What still remains of Kaldor's laws ?", E.J. 91, March 1981.
- Cairncross A. (1970), article in, "Induction Growth and Trade-essays in honour of Sir Roy Harrod." Eltis & Scott(eds.), Oxford, Clarendon, 1970.
- Dixon and Thirlwall (1979), "A model of regional growth-rate differences along Kaldorian lines". E.J.
- Cripps and Tarling (1973), "Growth in advanced capitalist economies 1950-70", Dept. of Applied Economics, Occ.paper No.40, C.U.P..
- Thirlwall A.P.(1974), "Regional economic disparities and regional policy in the Common Market", Urban Studies, Vol.11.
- Kaldor N.(1966), "Causes of the slow rate of growth of the U.K., an inaugural lecture". Camb. U. Press.
- Kaldor N.(1970), "The case for regional policies", S.J.P.E. Nov.
- D'Antonio M.(1979), "Struttura economica, stabilita e sviluppo del Mezzogiorno". Liguori, Napoli.
- MacDougall report (1977), Commission of the European Communities, "Report of the study group on the role of public finance in European integration", 2 vols., Bruxelles.

- Graziani A. & E. Pugliese (1979), "Investimenti e disoccupazione nel Mezzogiorno", Mulino, Bologna.
- Accornero A. & S. Andriani (1979), "Gli anni settanta nel Mezzogiorno", De Donato, Bari.
- Mackay D. & R. Hart (1975), "Wage inflation and the regional wage structure", in, M. Parkin & A. Nobay (eds.), "Contemporary Issues in Economics", Manchester University Press.
- Ashcroft B. (1978), "The evaluation of regional economic policy - the case of the U.K.", University of Strathclyde, Studies in Public Policy.
- Tuppen J. (1980), "France", Praeger.
- Lutz V. (1962), "Italy - a study in economic development". Oxford.
- Ewers and Wettman (1980), "Innovation oriented regional policy",  
- Regional Studies No.3.
- Marshall J.N. (1979), "Ownership, organisation and industrial linkage: a case study of the Northern region of England", Regional Studies No.6.

P A R T      T H R E E

REGIONAL STRUCTURE AND PERFORMANCE

Chapter 5      Unequal structures

- 5.1. Firm size structure ownership and the implications for the regional economy
- 5.2. A case study of differences in sectoral structure as between regions
- 5.3. Regional employment structure - qualitative aspects of regional employment
- 5.4. The regional implications of the spatial and sectoral distribution of research and development activities
- 5.5. The business - service sector as a bottle-neck to innovative capacity

Chapter 6      Unequal competition - the spatial distributions effects of strategic firm behaviour

Chapter 7      The role of the large corporation in regional development - the growth of the Multinational Enterprise

Part 3 , conclusions.

Bibliography, chapters 5,6, and 7.



### PART III

#### Regional structure and performance.

##### Chapter 5. Unequal structures.

###### 5.1. Firm size structure, ownership and the implications for the regional economy.

As a general consideration on the structure of industry in the l.d.r.'s , we may note that there is a common tendency for the average size of production units to be rather small by comparison with those elsewhere. One explanation of this phenomenon is clearly the labour pool constraints in often sparsely populated areas, and a number of studies have found a positive correlation between town size and the size of industrial units (Spooner 1972, Commissariat Général du Plan 1971, Hansen 1974, p.111).

Whether this is, by itself, a positive or negative feature is in general open to discussion. It should however be pointed out that such firm structure<sup>1</sup> often results in a fairly fragile

---

<sup>1</sup> Whether or not they are applicable in general, we should perhaps point to the following findings of a number of U.K. studies on small firm development. Firstly, rates of firm turnover tend to be higher than those of larger firms - both with respect to closures and openings (Scot. Econ. Bul. 1980). Secondly, only a very small proportion of small firms eventually reach medium size proportions - one study found that only 1.4% of new firms in 1963 (in one region, Clydeside) had reached the 100 employee level nine years later (Firn and Swales). Thirdly, whilst small firms may play an important role in gross job creation (Fothergill and Gudgin, 1979), a closer look at the figures for the Midlands region shows that this growth was in fact attributable to relatively few firms - 85% of gross gains were in 10% of the small establishments considered (Storey, 1979).

industrial employment base. Rates of turnover in job creation tend to be relatively high under such circumstances. For example, the rural areas of France, whilst gaining 256,000 new industrial jobs between 1962-67, at the same time lost another 202,000 due to industrial closures (Cazes and Reynaud, 1973). In Ireland, the major development areas<sup>1</sup> between 1973 and 1977 accounted for 18% of the total number of industrial job losses whilst representing only 15% of national industrial employment (in 1975)<sup>2</sup>. Whilst firm size is clearly not the only factor involved, it would however seem that such job losses can often be traced to a generalised decline in employment in small firms which tend to be predominant in the less developed or rural regions. For example, whilst employment in large and medium sized establishments in France increased by 5% and 12% respectively between 1962-68, it decreased by 10% in small establishments (less than 50 employees) over the same period (Hansen, 1974, p. 60).

In Italy, the small-scale<sup>3</sup> manufacturing sector is largely composed of firms producing "traditional", largely consumer goods (58%) and engineering firms (30%). Whilst between 1961-71 in the Centre-North, employment in this firm-size category increased by 18,600 (+ 2.0%), in the South employment fell by 36,800 (- 11.0%) over the same period<sup>4</sup>. Furthermore the South exhibited a much lower share of employment in medium and large sized enterprises<sup>5</sup>.

---

<sup>1</sup> I.e. those regions wholly classified as such; Donegal, N.W., N.E., West.

<sup>2</sup> I.D.A. and Labour Force Survey.

<sup>3</sup> 10 or less employees -- the available figures do not unfortunately allow a broader definition of this term.

<sup>4</sup> SVIMEZ (1978), p. 152-155.

<sup>5</sup> In the South (1971) around 34% of manufacturing employment was in units of over 101 persons, compared to 47% in the Centre-North. Moreover in the South, these large units were more highly concentrated in particular sectors than was the case in the Centre-North; for example around 63% of southern employment in units of over 500 employees was in base sectors (largely metallurgy, chemicals and transport equipment).

There are essentially two alternative approaches to this problem: (i) aiding employment growth in profitable indigenous firms and (ii) attracting new firms to the area. As we have seen, the necessary job creation targets may be particularly high in the peripheral regions. Moreover, as labour-intensive traditional industries are gradually replaced by technologically more advanced enterprises with relatively capital intensive processes, it becomes clear that, as total employment is concerned, a region may have to run hard to stand still.

A fourth point we should make is that the introduction of medium and large sized manufacturing establishments in an environment of predominantly small-scale, "traditional" (i.e. viz. labour intensity and products) firms, is likely to lead to relatively (viz. m.d.r.s) high levels of concentration in particular sectors, with quasi-monopoly positions in product and labour markets, being obtained by the (larger) newcomers. This may especially be the case where regional wage differentials subsequently (and perhaps as a result) become narrower.

An example of the Italian case will serve to bring out the extent of regional differences in this sphere. In 1975, Southern Italy accounted for 12.1% of Italian manufacturing employment in establishments of over 20 persons, and 11.6% of the total number of establishments<sup>1</sup>. This is to be compared with a share in total manufacturing employment of 18.9% in the same year. However, a sector by sector analysis brings out even more striking differences. Taking four of the largest "modern" sectors the table below gives the total number of enterprises in the south and the south's

---

<sup>1</sup>The following figures are derived from Eurostat-Structure and activity of industry in 1975 (1978, vol. XIV).

share in the overall number for any given sector.

Sector	Number of firms in South (+ 20 employees)	Number of firms in South as % total number for sector, in Italy
Manufacture of metal ar- ticles	333	8.8
Electrical engineering	158	9.8
Mechanical engineering	120	3.9
Motor vehicles & parts	47	8.7
All manufac- turing	-	11.6
Source: Eurostat, op. cit., p. 59		

In the case of electrical engineering it is to be noted that 70 out of these 158 establishments are located in the Naples region with four out of the remaining seven regions having between one and seven establishments each. Turning to smaller more specialised and technically advanced sectors, the deficiencies are even more pronounced. For example in instrument engineering, less than 7.0% of all firms (i.e. 27) are located in the south (and less than 4.0% of employment in this sector). 10 of these establishments are in the Naples region and three regions have no firms at all in instrument engineering. The contrast with more traditional sectors is clear; for example in food/beverages/tobacco, 25% of all firms were located in the south, as was 19% of employment (in this size category).



Another aspect of firm structure in the l.d.r.s is the degree of external ownership and dependence that this entails. One should then look at the overall corporate strategies of such enterprises and examine their relationship with indigenous firms.

Some idea of the degree of external (in this case foreign) ownership is obtained when one considers that for the manufacturing sector in Southern Italy, around one in five jobs were in foreign owned branch plants or subsidiaries<sup>1</sup>. For sectors such as chemicals and rubber, the figure was well over one in three.

In the case of France, more detailed figures are available on the extent of extra-regional enterprises in terms of industrial employment and investment. One of the major factors here is the dominant role of Paris. In 1971, firms based in the Paris region controlled 39.9% of employment in the provinces<sup>2</sup>. In terms of investment this measure of dependency ran to 56.3%. As one author put it: "One of the paradoxes of decentralisation ... is the increased degree to which Paris now controls and influences industrial development in provincial France. This has resulted from the outward movement of manufacturing plant, while the control and management operations of companies have tended to remain in the capital"<sup>3</sup>.

In some development areas the term "indigenous-firm development" seems hardly applicable. In Basse-Normandie for example, only one fifth of regional investment was undertaken by local firms, nearly four fifths being

---

<sup>1</sup>M. Benetti et al(1975), Table 2, p. 47. The figures relate to 1972 and concern enterprises with over 20 employees.

<sup>2</sup>Figures obtained from Economie et Statistique(1976), no. 80, "Dépendence et domination économiques inter-régionales", pp. 3-12. It should be noted that the reverse does not apply -- only 3% of employment in the Paris region is attributable to firms based outside Paris.

<sup>3</sup>J. Tuppen(1980), p. 128.

attributable to enterprises based in the Paris region. The Languedoc region, far removed from Paris, is a similar example.

That such external control is essentially limited to Paris-based firms is shown by the fact that only 3.5% of total industrial employment in France is in the form of extra-regional employment of multiregional firms based in the provinces. No other region even approaches the level of external ownership exercised by Paris-based firms -- whilst these control some 1.3 million jobs in the provinces, provincial firms employ less than 160,000 persons outside their own region. These figures might suggest that local enterprises have not, in general, reached a sufficient size to warrant operating additional plants in other regions<sup>1</sup>.

The importance of the previous discussion lies not so much in the degree of external ownership per se, as in the type of investment and plant which it entails.

A good deal of evidence suggests that much of the investment by externally owned firms in the development areas of many E.C. countries over the 1960s and 70s was of the branch plant type which involved the opening of new plants or extension of existing ones<sup>2</sup>.

There are several reasons for expecting that the linkage effects and induced development effects on local industry from this form of investment may be somewhat limited.

---

<sup>1</sup>Ibid., p. 7.

<sup>2</sup>Vis. U.K., Mackay & Thomson(1979), vis. Ireland, McAleese & McDonald(1978), vis. W. Germany Hansen 1974, Bade 1979, vis. France Hansen 1974 and Ch. 9 of this volume, vis Italy see Ch. 9.

Firstly, in the context of corporate strategy, production in such plants may only relate to intermediate stages in the final production process (for which the region may have some specific cost advantage), with sub-contracting kept to a minimum; components being bought in from other regions or countries, and the semi-finished product going for assembly or completion elsewhere<sup>1</sup>.

This phenomenon is particularly noticeable in foreign-owned enterprises where intra-firm linkages and specialisation exist to a higher degree. In the case of Ireland for example, it was found that in the (non-food) manufacturing sector, new enterprises in the foreign-owned sector on average purchased only 11% of their materials and components from Irish producers compared with 22% in the case of domestic enterprises<sup>2</sup>. Of these overseas enterprises 74% conducted some trade with affiliates. Sales to affiliates amounted to 55% of these firms exports and purchases from affiliates averaged 29% of imported materials<sup>3</sup>.

Secondly, to some degree, the reasons determining plant mobility and therefore to some extent their potential for location in development areas, suggest that local linkages may be less important for such mobile enterprises. In industries where specific linkages are important there will be relatively few alternative locations, and plant mobility will consequently be low. In other words, plant

---

<sup>1</sup>For example in the case of the decentralisation of the French automobile industry, Paris has still remained the major centre for vehicle assembly with decentralisation affecting specialised operations rather than the full range of manufacturing and assembly activities (Tuppen 1980), pp.125-6.

<sup>2</sup>McAleese and McDonald (1978), p.328. The figures relate to 1974.

<sup>3</sup>McAleese (I.D.A. 1977). For the linkage effects of MNE-owned plants in France & Italy see DATAR, Livre blanc (1974) esp. pp.59-60, and Business International, I.A.S.M. report (1974) — out of 44 companies surveyed, only 7 expressed that they had made contributions to fostering growth of supplier or customer industries. See also Bennetti et al (1975) esp. pp. 79-84. For the U.K. (northern region) see Marshall (1979) p.541.

mobility may be highest in sectors where industrial linkages and local external economies are least important. Indeed, evidence for the U.K. suggests that there have been few backward linkages between mobile and local established firms (Townroe 1975).

Another factor affecting mobility may be the degree to which internal economies of scale in general and economies of integration in production are important. If these do not constitute an overriding factor, the production process may effectively be split up between various plants to take advantage of certain local or regional locational advantages (eg. labour costs or availability in the area of labour intensive processes). There is some evidence to suggest that, as far as internal economies are concerned, the electrical engineering sector in particular may largely conform to this pattern.<sup>1</sup> Indeed it is notable that the electronics industry has been at the forefront of many regional development programmes.<sup>2</sup>

However, a study of the electronics industry in Scotland (which has a somewhat longer history and greater size than in the Irish case), suggests that although significant employment gains have been achieved by attracting M.N.E. branch plants to the area<sup>3</sup>, linkages with local firms in the same sector have not been great. Specifically, "the very small pool of employees in indigenous firms suggests that the long term achievements of the policy, and

---

<sup>1</sup> See the aforementioned study by Townroe & Roberts (1980), "The electrical engineering industry represented the only sector in which the internal economy variable was generally either insignificant or negatively related to performance" (ibid., p. 165). Furthermore, external economies also appeared to have little impact on the performance of enterprises in this sector (ibid., p. 167).

<sup>2</sup> See IDA (1979), Industrial Plan 1978-82, p. 38 and ch.5 of this volume.

<sup>3</sup> McDermott (1979). 91% of employees in this industry belonged to externally owned firms. Furthermore, "the largely undifferentiated branch plant, as opposed to the enterprise", was found to dominate employment in the industry (ibid., p. 293).

the contribution of multinationals to the local economic base, in so far as these are reflected in the development of indigenous enterprise, has not been significant"<sup>1</sup>. In particular, "purchasing linkages between multinationals and Scottish suppliers were not pronounced, despite the fact that indigenous firms were heavily dependent upon local market opportunities"<sup>2</sup>.

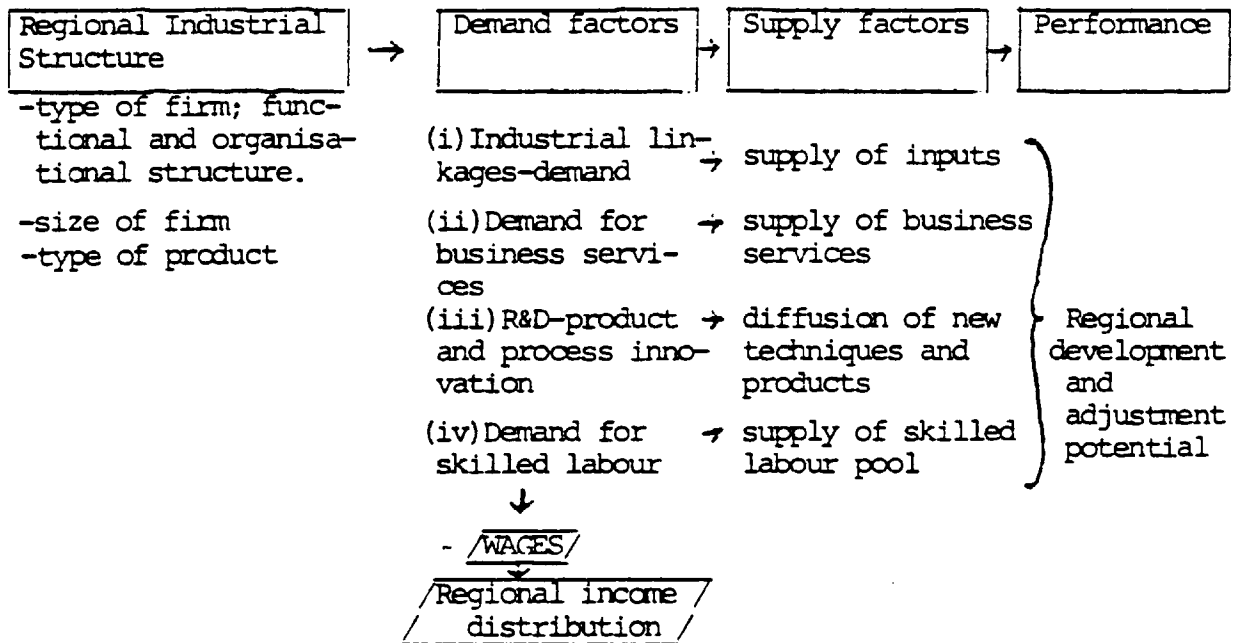
In conclusion, the spill-over effects from branch-plant in many development areas of the E.C. have in general been very weak, and as such lead us to doubt the long-term effectiveness of regional policies in the 70s to achieve significant induced development in local indigenous industry.

However, the demand created by mobile plants for intra-regional industrial inputs represents only part of their actual or potential impact on the local economy. In addition we must consider the demands placed on the local economy by these firms with respect to such factors as skilled labour, business services and in general their contribution to transferring technological progress and innovation to indigenous sectors of the economy. In an analytical framework this process may be schematised as follows:

---

<sup>1</sup>Ibid., p. 293.

<sup>2</sup>Ibid., p. 304. "While the multinationals were an important element in the environment of indigenous firms, the converse was apparently not true."



In addition, government policy may be instrumental at various stages of the above process in either attracting new firms to the area or in promoting supply adjustment to accommodate particular demands of the system. Examples could be financial aids to small-medium sized supplier firms and service sectors, training grants and provision of facilities, grants towards R & D and the implementation of new techniques and products (including grants for re-equipment). In other words, the above analysis would suggest that regional policy should be more oriented towards the long-term development potential of the regions and the problems of short-term adjustment and innovation.

The discussion in this section was limited to firm structure and industrial linkages. We shall now turn to consider the remaining determinant factors of regional development and adjustment potential.

5.2. A case study of differences in sectoral structure as between regions.

One result of external dependence is the division of labour at a spatial level, deriving from the internal division of activities between the component parts of the integrated firm. A notable example is the West German case, where it has been observed that the functional diversity of industrial establishments tends to diminish with increasing distance from the core of the urban agglomeration<sup>1</sup>. As a result, one characteristic of the industrialisation of more distant rural areas has been, "the often subsidised spread of relatively unfavourable organisational or industrial structures rather than ...an improvement of local and regional location qualities".<sup>2</sup>

A key question in this context, however, is whether the involvement of integrated firms operating in several regions necessarily implies a different outcome from what would have obtained with production based on non-integrated firms. For example, we may ask whether, if region A is "good" at activity Y, will it not be the case that, with or without the integrated firm, activity Y will still be located in region A ? Whilst it is always difficult to predict what would have happened if things had been otherwise, there are reasons to believe that the outcome would indeed have been different. In the first place, the type of activities concerned are often well out of the range of indigenous l.d.r. firms(eg. electronics, automobiles, chemicals, refining, etc.) and more typical of the larger integrated corporation(about which more will be said later). In the second place, even in the event where it could be said that the final result would be similar - that is in respect of final production, and, for example, where existing firms are acquired by 'outside' firms - the point remains that the integrated newcomer is certainly more likely to locate a greater proportion of it's management, service and R & D activities outside the region, and this, in itself, would lead to marked differences in the qualitative demands for labour as between the two cases.

<sup>1</sup> Hansen(1974),p.132. In a study of intra-regional differences in wages and salaries in Baden-Württemberg, it is claimed that the organisational structure resulting from the abovementioned industrialisation process, and the differentiated distribution of growth industries, were largely responsible for sustained regional income disparities in this area. Ibid.

<sup>2</sup> Ibid.p.133.

This type of functional division of tasks within the context of larger corporations may be partly explained by the product life-cycle hypothesis (Hoover and Vernon 1962), according to which products and plants in production at the earlier stages of development will more often than not, be located near the central areas, where proximity to high-level headquarters functions (including research and development facilities) and various external economies may be of overriding importance. On the other hand, products which are at the later stages of the "life-cycle" and for which standardised production processes are possible may more conveniently be delegated to branch-plant production in less central areas.

Alternatively, if the production of the good involves several intermediate stages of production which are vertically integrated into the firm, the geographical spread of branch plants and subsidiaries may be determined by locational region-specific advantages, whilst the location of final product plants may be determined by market demand factors, such as proximity to customers.

In short, in the case of both horizontally and vertically integrated firms there are reasons to believe that the spatial outcome of production activities will result in a functional division of tasks as between regions. If this is the case one should be able to distinguish qualitative spatial differences in production processes and products, including labour and service requirements, research and development activities and the delegation of headquarters functions.

In the following pages, we shall apply the analytical framework outlined above to a particular area, that is, the industrialisation process in Southern Italy from the mid-1960s to the 1970s.

Three manufacturing sectors will be considered, and the aim is to outline, within each sector, the essential differences in industrial structure as between the Centre/North and South, and assess the implications for Southern development potential.

In many of these sectors the major spatial differences in development trends can be summarized as follows; in the Centre/North industry was largely preoccupied with



rationalising production both in terms of production processes and products in an attempt to maintain levels of international competition and "move up market" to satisfy demand for more sophisticated products, resulting from fast rates of growth and rising standards of living in the Italian economy<sup>1</sup>. Increased international competition and the need to expand, coupled with growing rigidities in the labour market and substantial wage increases, led to an increased propensity to expand basic and standardised products in low-cost southern locations<sup>2</sup>.

Whilst Northern industry managed to rationalise with lower levels of investment than in previous periods and obtained substantial productivity gains, in the South high levels of investment in basic and standardised production, resulted in much smaller gains in productivity relative to investment. In other words, development in the South occurred through a quantitative spread of production plants rather than any qualitative restructuring of industrial capacity. It is therefore understandable that there were few examples of productivity gains that were not directly attributable to investment in fixed capital<sup>3</sup>. When, after 1974/75, the pace of industrial investment in the south slowed down and declined in real

<sup>1</sup> See Amendola & Baratta, SVIMEZ (1978), p. 100. In the C/N rationalisation of essentially "traditional" industries (food, clothing, footwear etc.), was however marked by falling levels of investment and faster rates of growth of productivity.

<sup>2</sup> That S. Italy continues to act as an intermediate production base rather than an active competitor in international markets is shown by the fact that even in 1979, S. Italy accounts for less than 5% of Italian manufactured exports (SVIMEZ, 1980, p. 32).

<sup>3</sup> Ibid., p. 106. The relevant figures for manufacturing industry are as follows (average annual changes at constant 1963 prices)

	South		Centre/North	
	1951-63	1963-73	1951-63	1963-73
Gross fixed investment	12.1	9.1	8.0	2.4
Value added	7.0	7.6	8.6	6.5
Employment	1.1	1.0	2.4	1.0
V.A. per employee	5.9	6.6	6.0	5.4

Source: Ibid., p. 7.

terms<sup>1</sup> (and relative to the C/N), the result was a widening gap in productivity differentials between the two areas<sup>2</sup>.

Although the relatively weak secondary effects of extra-regional industrial investment on growth in output and productivity of the indigenous sector can in part be attributed to the poor structure of the latter<sup>3</sup>, the fact remains that to a large extent, such investments as took place were incapable of creating the necessary industrial linkages for that purpose.

#### (a) Chemicals

By the late 1960s it became clear that the size and location of existing basic petro-chemical plants was unsatisfactory for the purpose of further expansion. The new requirement was for "productive structures based particularly on ethylene which can only be produced economically in very large plants, and the formation of interconnected ... areas of chemical development in which are concentrated a series of plants going from the refining of crude oil through plants for the production of basic intermediate goods<sup>4</sup>."

On this basis, it was decided to locate two of the new plants in Sicily where petro-chemical and chemical

---

<sup>1</sup>Industrial investment (constant 1970 prices, 1973=100) in S. Italy fell from 103.3 in 1974 to 60.3 in 1979, and in the Centre/North from 107.0 to 99.6 (SVIMEZ, 1980, p. 90).

<sup>2</sup>As a percentage of productivity in the C/N, the relative figure for S. Italy declined from 78.6% in 1973 to 77.0% in 1979 (ibid., p. 91).

<sup>3</sup>"The relative fall in southern productivity ... is partly explained by the fact that small and medium sized production units in the Mezzogiorno, especially in traditional sectors, are not able to maintain the same rate of progress as similar sized units in the Centre/North in terms of technical and organisational innovation" (ibid., p. 91).

<sup>4</sup>Dunford (1977), p. 32.

(own trans.)

plants already existed. However, apart from the low labour intensity of these projects<sup>1</sup> (which were anyway intended to be accompanied by rationalisation and reduction of employment in existing plants in the area), any secondary employment effects through forward linkages were more likely to accrue to firms in the C/N, than those in the South. In 1971, around two thirds of southern employment in this sector was in base chemicals and refining. There were only 15 major establishments of over 100 employees in secondary chemicals in the South as against 250 in the Centre/North<sup>2</sup>.

What the figures from 1963-73 bring out is that whilst rationalisation in northern industry allowed substantial growth of output with relatively little investment, in the south, the "reproduction" of base chemical plants offered few advantages for growth in associated activities. Whilst proximity to backward linkages is important in base chemicals, the same does not appear to be the case with secondary chemicals and there has been no rush to relocate in the South.

---

<sup>1</sup> Ibid.

<sup>2</sup> SVIMEZ, 1978, p. 59. In the former case with less than 5,000 employees as against 90,000 in the latter. Furthermore there would not appear to be a high degree of locational proximity regarding the largest plants (+ 500 employees) in base and secondary chemicals; in base chemicals there are several plants with a total of 24,400 employees in Puglia, Calabria, Sicilia and Sardegna. In secondary chemicals there are only two plants (1,400 employees) in Abruzzo (the northernmost region) and Basilicata. Source: SVIMEZ, 1980, table 55.

In any event, over the period mentioned north/south differences in incremental capital/output ratios were more marked in chemicals than for practically any other industrial sector<sup>1</sup>. The rate of growth of southern value added in this sector (annual average 11.5%) appears relatively modest considering that annual investment in the south averaged an amount equal to the entire value added of this sector<sup>2</sup>. With a rate of accumulation of less than half that in the South, the Centre/North managed to achieve a substantially higher rate of growth of productivity<sup>3</sup>.

#### b) Transport equipment

Although this sector is composed of such diverse elements as shipyards, rail equipment and automobiles, the major new developments in the South have been in automobile assembly, resulting from the decision of Alfa-Romeo and FIAT to locate new assembly plants in that area in 1970.

Although these events resulted in a fairly steady increase in employment, the same cannot however be said with regard to output and productivity. Whilst the annual rate of accumulation in the South averaged 19.7% between 1963-73, as against 3.9% in the Centre/North, value added increased by only 10.7% compared to 8.1% in the C/N.

---

<sup>1</sup>SVIMEZ (1978), fig. 7, p. 58.

<sup>2</sup>Ibid., p. 56.

<sup>3</sup>5% per annum as against 3.9% (value added per employee). It is also to be noted that "a not insignificant part of the additional value added created by these investments (in base sectors) was transferred via factor remunerations, or in any case through the accounts, of firms outside the area" (ibid., p. 58). See also vis automobiles.

Moreover productivity increased at a substantially slower rate in the South (2.5% as against 4.2%)<sup>1</sup>. The relatively slower productivity performance in the south may however be traced to the type of investment in the decentralisation process. By far the greatest part of this investment took place in automobile assembly, which typically presents lower average levels of productivity as compared to earlier stages of the production process (partly due to the relative labour-intensity of automobile assembly).

Lastly, as in the case of the chemicals sector, it should be noted that a certain proportion of productivity gains resulting from decentralised investment accrue to the enterprise as a whole. In the first place factor remunerations such as general services and distribution costs, will in part be allocated outside the plant. Secondly, the "capacity" effects in terms of increased efficiency and productivity and investment in related activities, will extend to the whole enterprise, in terms of rationalisation of production structure<sup>2</sup>.

In short, an important part of the benefits resulting from relocation, may be internal to the firm, and when the major share of productive activities are located elsewhere, external to the region.

#### c) Food\_and\_Tobacco

Unlike the two sectors examined previously, the food and tobacco sector does not appear to have experienced any significant degree of plant relocation by

---

<sup>1</sup>Ibid., p. 69, table 31. Southern productivity fell from 91.6% of the C/N average between 1961-63 to 84.2% between 1971-73.

<sup>2</sup>For further discussion of these points see *ibid.*, pp. 73-75.

firms based in the Centre/North.

In fact, the number of plants with over 100 employees fell substantially between 1961-71, from 120 to 93<sup>1</sup>, whilst some increase was recorded in the C/N. Overall, employment declined by 24% in the South, although subsequently, employment levels have remained almost stationary in both areas.

Between 1963-73, the Centre/North experienced a rate of growth of output of more than double the Southern average together with a significantly higher rate of growth of productivity. This occurred in spite of the fact that average annual investment remained more or less unchanged in real terms in both areas over this period<sup>2</sup> and that the South continued to account for a greater share of national investment relative to national value added in this sector (31% as against 24%).

Whilst in the C/N investment was used to rationalise and diversify existing productive capacity, in the South investment in modern plant still remained relatively labour-intensive in nature and oriented towards slow-growing traditional markets<sup>3</sup>. Apart from the relatively small productivity gains derived from this form of investment process, the failure of Southern plants to diversify production has been reflected in low levels of penetration of external markets and increasing competition with foreign producers. In the face of increased costs of

---

<sup>1</sup>SVIMEZ, 1978, p. 38 table 14. Although we have no figures on the average level of external ownership, the degree of foreign ownership in the South is much lower than in practically every other sector, that is, less than 8,000 employees or around 8% of sectoral employment. Benetti et al., p. 47.

<sup>2</sup>Ibid., p. 31 and pp. 121-2.

<sup>3</sup>See discussion in *ibid.*, pp. 37-42.

primary products there has been an increasing tendency to use imported raw materials.

This, in a sector which is already notable for lack of diversification and seasonality with respect to backward linkages in primary production<sup>1</sup>.

Similar developments to those outlined above may be traced in other major sectors of Southern manufacturing industry. The structure of the mechanical engineering sector for example, characterised by a high proportion of small and very small enterprises linked almost exclusively to local demand<sup>2</sup>, may explain the relatively slow development of this sector in relation to its level of accumulation<sup>3</sup>.

In conclusion, although the very considerable new investments in the aforementioned sectors have undoubtedly served to increase employment and production capacity in Southern manufacturing industry, their impact has in many cases been severely limited by a number of factors. To briefly summarize these we have noted, (i) a lack of backward (automobiles) and forward (chemicals) linkage capacity, (ii) insufficient product diversification in

---

<sup>1</sup>Ibid., p. 42. It is notable that foreign-owned capital has been at the forefront of this process (in which vertical intra-firm linkages presumably play a role). For an account of cases relating to frozen foods, baby foods and pasta (Unilever, Heinz and Barilla), see Benetti et al. (1975), pp. 83-84.

<sup>2</sup>In 1971 around 68% of employment in this sector was in mechanical repair shops of a predominantly service nature and in metal work linked almost exclusively to the building sector. The corresponding figure for these sub-sectors in the Centre/North was 32% (1971 Census of Production).

<sup>3</sup>Comparing the years 1967-68 and 1972-73, annual investment in the South increased by 226.3% in real terms whilst output increase by 33.9%. The corresponding figures for the C/N were 23.8% for investment and 26.8% for output. Moreover by 1972-73 the South accounted for more than one fifth of gross fixed investment and less than one tenth of total value added in this sector.

many sectors, but especially food and tobacco, and (iii) a general scarcity of supplier firms in key manufacturing sectors such as mechanical engineering.

Although part of the low secondary impact of new investment is to be explained by the sheer lack of presence of firms in the indigenous sector capable of exploiting industrial linkages, it is also true that the linkage demands generated by these investments were either not of the type to promote such development or could easily be accommodated by firms located in the Centre/North. The above reflections seem to indicate the necessity to move towards a more ~~selective~~ type of development policy capable i) of determining final product markets which could be profitably exploited by local firms from l.d.r. locations, and ii) promoting supplier firms where local production could readily be expanded to substitute for 'imports', or more generally, where certain technical, financial or managerial deficiencies arise in the small/medium size firm sector which impede the development of industrial linkage. As such, more emphasis may need to be put on indigenous firm development and defining relevant bottle-necks to small/medium sized firms adjustment and development potential.



5.3. Qualitative aspects of regional employment

Although the evidence on this point is somewhat limited, what there is suggests that the employment effects of new plants located in the development areas of the l.d.r.s may have been essentially restricted to growth in quantitative terms. In qualitative terms, their contribution to the average skill level of the working population has often been negligible.

As we saw in the previous section, there are reasons to expect that the functional division of tasks within the context of large, multi-establishment corporations may be likely to result in qualitative differences in the demands for different types of labour at a spatial level.

It is worth noting however, that the final outcome may depend less on specific locational factors such as relative labour costs and availability<sup>1</sup> than on the internal production and marketing strategy of the firm. For example if headquarters functions, R & D, product development and production and marketing of final products are carried out in the central agglomerated regions, only the remaining intermediate and standardised processes may be left to be divided out amongst the rest. In other words locational factors may only be important with regard to high-level functions, whereas there may be no obvious reason not to locate other functions on a wider spatial level (especially if investment grants are widely available outside the central regions<sup>2</sup>). As such standard regional policy may play

---

<sup>1</sup>In this respect the results of our study on France in Chapter 9 suggest that labour cost and availability has only a weak impact on industrial location. The result that increasing distance from the central agglomeration region (Paris) has an important negative impact on location suggests that our theory of the "next best location" for certain activities may well have some relevance.

<sup>2</sup>Since capital subsidies are the main regional incentive in many E.C. countries one could perhaps expect that more capital-intensive processes may have been located in d.a.s than might otherwise have been the case. However if the relationship between capital intensity and skill requirements is not strong (e.g. electronics) it is consequently not to be expected that this will result in increased demand

only a passive role with regard to qualitative aspects of regional development (and function-specific decentralisation or deglomeration policies may consequently be more effective in this respect).

The above interpretation is not intended to present any hard and fast theory -- moreover it seems highly plausible that for particularly labour-intensive process firms will actively seek out low-cost locations<sup>1</sup> -- but it does suggest that there may be a broad range of activities in which corporate strategy is more likely to prevail than specific locational advantages and with regard to the location of which there may exist a certain amount of discretion.

Some of these points are brought out by two studies on the location of plants in electronics and light engineering sectors in France.

A study of the location of electronics passive components establishments created in France between 1954-1970 revealed that out of a total of 53 plants, 32 were located in areas with no or only a low level of subsidy, and only 12 were located in development areas with high subsidy levels<sup>2</sup>.

Moreover, with regard to skill requirements, another study of the impact of several large new plants (electronics and light engineering) in two cities in the West

---

(from previous page)

for high skill levels in development areas.

<sup>1</sup> However, as Holland (1976) has pointed out, these are anyway more likely to be found in the l.d.c.'s than in the ldr's of the E.C.

<sup>2</sup> Cf. Hansen (1974), p. 55. Moreover, large enterprises appeared to be more reluctant to locate in development areas than smaller ones.

of France revealed that the high level of demand for unskilled labour<sup>1</sup> created by the new plants had actually lowered the average level of skills in both areas.

On a somewhat broader scale, the degree of functional division of labour between regions can be assessed from the following set of figures relating to France.

Recalling the high degree of external ownership observed for the provinces in this country (see back) and the dominating role played by firms based in the Paris region, one would expect to observe, on the basis of our outlined hypothesis, substantial qualitative differences in the structure of the labour market as between these two areas. One might also expect differences to be more marked (i) for the peripheral development areas -- that is as distance from Paris increases and (ii) for regions where employment in externally owned enterprises is particularly high<sup>2</sup>.

In the first table we have considered eleven regions which have been divided up into three broad categories, that is; central agglomerated regions, regions which are partly classified as development areas, and regions in the West and South West which are totally classified as development areas<sup>3</sup>.

---

<sup>1</sup>Cf. Hansen(1974), pp. 61-62. In one case unskilled employment constituted 71.5% of total employment compared to 48.7% in existing enterprises.

<sup>2</sup>Although lack of data as to which sectors have high levels of external ownership in which regions implies that we shall not be able to make any more than general remarks on this question.

<sup>3</sup>See Chapter 9 for definitions and levels of subsidy available.

Table 1.

Employment structure (% share) by function (skill level), sector and region in France (1978).

Region	Sector Manufac.			Business Mechanical			Electronics Automobiles Chemicals			Industry Services Engineering & Electrical Engineering			Status <sup>b</sup>
	Skill	MPT <sup>a</sup> /unsk	MPT	MPT/unsk	MPT/unsk	MPT/unsk	MPT/unsk	MPT/unsk	MPT/unsk	MPT/unsk	MPT/unsk	MPT/unsk	
Paris		30.0/19.5	38.1	31.1/13.4	42.3/13.8	18.2/38.2	41.3/ 9.9	CAR					
Rhone-Alpes		15.0/32.7	25.7	19.5/24.3	21.6/37.9	14.3/39.2	24.4/11.0	CAR					
Nord		10.7/31.5	19.6	16.8/20.1	15.2/44.7	9.7/42.7	20.1/17.2	3					
Loire		11.1/34.8	22.7	15.6/18.6	15.4/53.7	9.2/46.1	16.8/27.0	2					
Auvergne		12.8/42.2	23.1	14.0/24.0	15.6/48.7	n.a.	19.2/17.1	2					
Languedoc		14.2/30.9	24.0	14.1/28.1	n.a.	n.a.	18.4/17.3	2					
Bsse Normandie		9.3/41.3	18.4	13.6/19.6	10.6/53.7	8.1/57.0	14.5/28.9	2					
Bretagne		9.2/39.9	23.3	14.0/20.0	11.0/59.6	6.2/59.9	13.5/36.7	1					
Poitou-Chts		9.9/39.1	22.2	16.1/24.1	11.7/49.0	10.0/41.8	18.1/30.4	1					
Limousin		10.1/36.9	29.6	15.5/10.5	14.8/48.2	13.7/34.3	n.a.	1					
Aquitaine		13.8/31.8	23.9	17.3/17.7	24.0/28.2	8.3/47.8	21.9/19.4	1					

Source: derived from INSEE, Serie D no. 72, juillet 1980.

<sup>a</sup>Whereas in Paris, the share of management and top professional staff was around 50% of MPT, this proportion was typically 1:2 or less for the other regions.

<sup>b</sup>CAR = Central agglomerated region; 1, 2, 3 = development areas, wholly, largely or partly classified as such (see ch. 5).

Key: MPT = management, professional staff and senior technicians.

unsk = unskilled workers and labourers.

n.a. = not applicable; employment in sector below 2,000 employees; in automobiles, restricted to regions which have received major decentralisations.

Employment within each sector<sup>1</sup> is divided up into high-level (management & technical) functions and low-level functions (unskilled labour), and the relative shares are given for each region and sector.

Looking down the columns, if our aforementioned hypothesis is broadly correct, one would expect to see a relative decline in high-level functions and an increase in low-level functions as between these three broad categories.

The results show striking functional differences in employment structure which are most marked for the Paris region. Rhone-Alpes does not however appear to fare consistently better than the remaining nine regions except marginally in manufacturing industry and most notably in chemicals and automobiles.

In other words only the Paris region, which is by far the major source of extra-regional investment, shows such considerable command over high-level functions in all sectors considered. As such, this result should not be surprising.

To summarise for the six sectors considered, the main results are as follows. In general, for all manufacturing sectors (excluding automobiles), whilst in the Paris region high-level functions occupy a much more important position than low-level functions (30%-42% of employment as against 10%-20%) the situation is almost exactly the opposite in the provinces.

However, the essential differences in employment structure vary somewhat between sectors.

#### Manufacturing industries

Whilst unskilled labour accounts for only one in five jobs in this sector in the Paris region, it constitutes

---

<sup>1</sup>The sectors chosen are those in which employment growth rates were highest over the period 1967-74, and for which decentralisation from the Paris region has been particularly marked. See Ch. 9.

around one in three jobs, or more, in the provinces. Differences in high-level function employment shares are even more marked. Whereas this accounts for 30% of manufacturing employment in Paris, only around one in ten jobs fall into this category in the provinces. Moreover, on average, in the provinces a lower proportion of high-level functions are composed of senior management and technical staff (around one third), than in the Paris region (around one half). Given the size and composition of management, professional and technical staff in the provinces, it would seem that these functions are by and large limited to the every day running of establishments rather than to higher level functions such as strategic planning, process and product development and basic R & D.

#### Business services

Only high-level functions are examined for this sector since differences in lower level functions are not as clear-cut as for example in manufacturing industry. Whereas these functions account for 38% of employment in Paris and 26% in Rhone-Alpes, in the development areas the share typically varies between 18% and 24% (in Limousin almost 30%). However, absolute size is also important and in this respect it is notable that Paris accounts for 41% of total employment in this sector. On the other hand, in Limousin, where the proportion of high-level functions is relatively high, this region accounts for only .68% of total business service employment as against 1.14% of total industrial employment and 1.4% of national population.

#### Mechanical engineering

In both mechanical engineering and chemicals, for each of the 11 regions, the share of employment in high-level

functions is higher, and that in low-level functions lower than the for manufacturing industry as a whole.

Regional differences are however very marked. Whilst almost one in three jobs in the Paris region are in high-level functions, the average in the development areas is less than one in six, and in Rhone-Alpes, one in five.

Again, whereas unskilled jobs constitute 13.4% of employment in Paris, there are wide differences in the provinces, with employment in this category generally ranging between 18% and 28%<sup>1</sup>. Since this sector is relatively large, such-differences are probably due to composition effects, however it is notable that differences in high-level functions are much less marked (14% to 17% in the D.A.s).

#### Electronics and electrical engineering

For such a highly research-intensive sector, it is not surprising given our earlier discussion, that by and large, functional differences in employment should be more notable than elsewhere.

Whereas in the Paris region over 40% of employment is in high-level functions and less than 15% composed of unskilled labour, the situation is almost exactly the reverse elsewhere<sup>2</sup>.

---

<sup>1</sup> In Limousin the figure is 10.5%. A further 60% of employment is in the category of skilled and semi-skilled workers which is 10% or more than in any other region. The result is probably largely due to craftsmanship requirements in more traditional specialisations for which this region is well-known.

<sup>2</sup> It is interesting to speculate whether the relatively high share of high-level functions in Rhone-Alpes and Aquitaine is due to the presence of very large centres in these regions. It is not merely by chance that in 1974 all three foreign-owned plants in Aquitaine were situated in Bordeaux, or that five out of six such plants in Rhone-Alpes were situated in Lyons, whereas foreign plants in other sectors in these regions showed more dispersed locational patterns (D.A.T.A.R., 1974).

Moreover, the fast rate of expansion in this sector combined with a high degree of external ownership and proliferation of branch plants suggest that the resultant spatial and functional division of labour forms part of a precise corporate strategy, and that the resultant functional patterns are hardly to be explained by regional differences in the structure of indigenous enterprises<sup>1</sup>.

In this respect it is interesting to note that the regions where employment in this sector grew fastest after 1967 (i.e. Bretagne and Poitou-Charentes where employment more than doubled between 1967-74<sup>2</sup>), and where the share of foreign direct investment is greatest, i.e. Loire, Auvergne and Bretagne<sup>3</sup>, were also those with the highest shares of unskilled labour (50-60%).

#### Automobiles

The proportion of unskilled labour to total employment in this sector is very high for all regions considered (40% to 60%). It is notable however, that in Bretagne and especially Basse Normandie where several major decentralisations have taken place, the proportion of unskilled labour is at the top end of the scale, around 60%.

However, regional differences in the share of high-level functions are more marked, and the differences are such as to suggest that little decentralisation of connected high-level functions has presumably taken place (again, notably in the area of Basse Normandie and Bretagne).

---

<sup>1</sup>In the provinces, foreign-owned plants alone accounted for 29.3% of employment in this sector. Moreover the level of foreign penetration was higher here than for any other industrial sector. Ibid.

<sup>2</sup>See Chapter 5.

<sup>3</sup>Employment in foreign-owned plants of over 200 employees accounted for respectively 53%, 87% and 42% of elec. engin. employment in these regions (DATAR, 1974, p. 43).



### Chemicals

This sector, which is again typically research intensive, exhibits substantial regional differences in functional structure, albeit to a lesser extent than in electronics.

Although in the Paris region the proportion of unskilled labour is even lower than in the electrical sector (10%), whilst the share of high-level functions is very similar (41%), in the development areas, the ratio of high to low level functions is generally more balanced.

However, there remain some rather significant differences in the share of unskilled labour as between the development areas. On this point, it is again notable that the three regions which have amongst the highest shares of unskilled labour (i.e. Bretagne, 37% and Poitou-Charentes, 30%, Loire 27%), are also those which experienced the fastest growth in employment over the period 1967-74<sup>1</sup>.

In other words it would appear that the growth in investment and employment that occurred in previous periods in the development areas (in chemicals, electronics and electrical eng. and automobiles) was to a large extent characterised by the delegation of lower-level functions to these regions.

This together with the dominating position of the

---

<sup>1</sup>Employment increased by more than a third in these regions over the given period. See Chapter 5.

Paris region with respect to high-level functions in manufacturing industry in general, are the main empirical findings of this section, and go a long way in supporting our previously outlined hypothesis.

Given the scarcity of data, it has not been possible however, to separate out a number of factors which may have influenced the general pattern. The relative importance of factors such as distance from agglomerated regions, the size and diversity of sectors within any region, and the level of external ownership, to name but a few, have at most been only partially taken into account<sup>1</sup>. Any further analysis of these points would however have been rather tentative.

At this point of the analysis, however, the results would seem to indicate (i) that firms establishing branch plants undertake only limited delegation of high-level functions, (ii) that these are largely centred in c.a.r.'s and that (iii) any differences in the functional demands of new plants in areas outside c.a.r.'s are marginal and not necessarily related to the distance of the region from the c.a.r., (iv) the functional demands made by new branch plants in the d.a.'s may be of a lower average

---

<sup>1</sup>For example the relative importance of the level of external ownership and distance from c.a.r.'s on the functional division of labour is not entirely clear, but may suggest that the former is of greater importance; Basse Normandie with by far the highest level of external ownership (71.5%), in spite of close proximity to the Paris region, records the lowest or second lowest share of high-level functions in every sector considered. Limousin on the other hand, with the lowest level of external ownership (29.5%), fares substantially better in most cases (for figures see INSEE(1976)p.6).

Table 2.

The share of the Paris region in overall employment by employment category in 1974.

<u>Employment category</u>	<u>Share of Paris region as % of total for category</u>
Senior engineers and professional technical staff with applied skills in management, planning, information, mathematics and economics and social sciences	66.9
Other senior engineers and technical staff	48.2
Senior administrative staff	43.1
Senior professional staff in banking finance and insurance	52.8
Employment in the legal and literary professions	56.2
Teaching and research staff in higher education	48.2
Doctors, dentists, pharmacists, vet. surgeons	38.7
Computer analysts and programmers	54.7
Senior professional and technical staff in publicity	77.6
Semi-skilled and unskilled workers	17.6
All employment	27.8
Population	19.2

Source: derived from INSEE serie D, no. 51, mars 1977, and Basic Statistics of the Community, 1975-76.

level than those of indigenous enterprises -- at least this is suggested in several cases where the influx of externally owned plants has been relatively high<sup>1</sup>.

Our second table is aimed at complementing the previous discussion by describing absolute rather than relative differences in the functional structure of employment.

Rather than considering particular sectors, we have chosen to give an overall breakdown of high-level functions for the Paris region. The dominant position of this area becomes immediately obvious; over one half of senior management, technical and research jobs are concentrated in Paris. Furthermore such concentration of high-level functions is by no means limited to the industrial sector; the same situation applies to banking and insurance institutions, the legal profession, higher education and even the medical profession.

Whereas in Paris the national share of high-level functions is almost double its share of the active population, in all other regions, including Rhone-Alpes, the share is lower, often considerably, than that of regional working population.

A final point we should consider is whether there are any significant functional differences within manufacturing sectors between establishments of different size. Relevant figures are given in the following table.

---

<sup>1</sup>The structure of functional demands may also depend on establishment size, and we shall shortly consider whether this factor has any relevant explanatory power.

Table 3.

Employment structure by function, sector and establishment size, for France (1978).

Sector /no. employees /functional level	11-49 MPT/unsk	50-199 MPT/unsk	200-499 MPT/unsk	500+ MPT/unsk
Mechanical engineering	18.1/21.1	18.0/23.3	20.1/25.5	20.1/26.7
Elec. & elec. engineering	27.2/22.0	24.1/30.9	22.3/42.2	27.4/37.0
Automobiles	18.0/31.9	13.1/39.6	12.0/50.4	11.5/50.2
Chemicals	29.3/26.6	28.3/22.4	27.3/18.9	26.3/14.5

Source : INSEE, serie D, no. 72, 1980.

key: MPT = management, professional staff and senior technicians  
unsk = unskilled workers and labourers.

Only in the automobile sector is there any clear decline in the proportion of high-level functions as establishment size increases. However the proportion of unskilled labour in the workforce shows a clear tendency to increase with plant size in three of the sectors considered: mechanical engineering, electronics and automobiles. In the chemicals sector the situation is clearly the reverse and the smallest establishments employ proportionally about twice as much unskilled labour as the largest ones.

Overall, and compared to the first table, this would seem to suggest that, for the sectors considered, the relatively high proportion of high-level functions in the Paris region and the correspondingly low share in the development areas ( and conversely for low-level functions), cannot reasonably be explained by firm-size structure in the vast majority of cases. Rather, these figures are consistent with our earlier hypothesis that functional differences as between regions are more likely to find an explanation in the deliberate strategy of firms based in the Paris region (or abroad) to maintain central control over high-level functions.

We shall now turn to consider the precise implications of the above findings regarding the development potential of the less developed regions.

5.4. The regional implications of the spatial and sectoral distribution of research and development activities.

In a fundamental sense the ability of a region to achieve self-sustained and continuous growth will depend on the capacity of firms established there to adjust to market demand and technological change. This argument is especially applicable to certain fast-growing or research-intensive activities, where competitive advantage goes to those firms which are most willing to innovate, and where "the distance between the front runner and those who are equipped to move forward only at normal speeds of technical advance is glaringly apparent."<sup>1</sup>

Very often the sizeable basic burden imposed by R & D costs implies that such activities may more readily be carried out by larger industrial enterprises.<sup>2</sup> Moreover the state, which in many Western European countries has for some time been financing up to two-thirds or more of industrial R & D<sup>3</sup>, in important science-based industries,

---

<sup>1</sup> Shonfield (1965), p. 375, see also pp. 59-60.

<sup>2</sup> Although our previous table might seem to present a less concentrated impression of high-level functions (which include R & D empl.), it should be noted that the figures referred to establishments rather than firms or enterprises. The five biggest companies in Belgium and the Netherlands in 1970 accounted for 30% and 65% respectively of total industrial R & D in these countries (OECD 1978, p. 172). For the Netherlands, detailed figures show that firms with less than 200 employees accounted for little over 4% of industrial R & D expenditures (ibid., p. 169).

<sup>3</sup> Shonfield (1965), p. 372. R & D expenditure, and in particular state aid to R & D in general is concentrated in a few key sectors. The present plans by the French government to nationalise large sections of industry would for example give state control of 93% of R & D in aeronautics 60% in electronics, 62% in chemicals and 29% in pharmaceuticals, which together account for 53% of total industrial R & D expenditure (Le Monde, 22 July 1981).

may have explicitly encouraged such developments; as one author has put it, "many of the beneficiaries are likely to be precisely the big well-established firms, with a proven reputation for the execution of research or development programmes and the quality of staff to do the job well."<sup>1</sup>

However, the evidence suggests that the less developed peripheral regions may largely miss out in this process; in the first place due to a notable absence of large sized firms in R & D intensive sectors, and in the second place due to the tendency of firms which do undertake R & D, to locate research establishments in the central areas<sup>2</sup>.

Moreover the existence of a large pool of scientific personnel together with the high propensity to locate corporate headquarters in such central areas, continues to ensure that these, rather than peripheral regions will continue to attract the bulk of new R & D activity.

As a result, firms in peripheral regions may be at a severe disadvantage with respect to cost or ease of access to new technology. Furthermore given the high propensity of corporate branch-plants in peripheral areas to undertake fairly standardised activities based on transferred mature technology, there may be very low technological spin-off effects on supplier firms in these areas.

---

<sup>1</sup>Ibid. One particular case cited is that of the postwar defence industries, pp. 372-3. See also ch. 9 vis France. As Shonfield also points out, the allocation of state R & D funds to large private enterprises is often aimed at maintaining the pace of technological advance in key sectors, which face strong foreign competition; see discussion pp. 374-76 vis computers.

<sup>2</sup>One study of the regional distribution of R & D employment in the UK came to the conclusion that "the group and detached R & D centres of manufacturing industry account for some 20,000 jobs in the South East, 3,500 in Central and Southern England and 4,000 in development regions", E.C. (1977) Regional Policy Series no. 3, p. 120. The evidence with respect to



Indeed there would seem to be evidence to suggest that technological impediments place severe constraints on the growth of small firms in peripheral regions, which is reflected in their lower rates of innovation as compared to similar sized firms in central areas<sup>1</sup>.

Defining the term innovation as the commercial application of new technology, we may, in the first instance, distinguish between innovation relating to production processes and final products. We may then turn to consider the specific bottlenecks that may be faced by independent firms in peripheral regions concerning the development of each.

With regard to product innovation, it is often hard to see how any really substantial modifications in the final product can take place without some level of applied R & D<sup>2</sup>. Moreover, it is also possible that product innovation will necessitate major changes in the production process.

Imitation is always possible however and this may be especially beneficial where cost advantages (e.g. labour) are obtainable. Furthermore, techniques which require small

---

(ctd. from previous page) M.N.E. branch plants and subsidiaries suggests that most basic and applied R & D takes place outside the peripheral regions, often abroad in the home base. DATAR(1974), p. 61, Business International(1974), p.165.

<sup>1</sup>cf. IIM(1980), p. 12. Studies relating to W. Germany and the UK.

<sup>2</sup> The automobile industry is a good example where the cost of developing new models has risen substantially over recent years. Furthermore the progressive shortening of the average lifetime of products in high-technology sectors, implies that product development may necessitate continuous and growing levels of R & D. See Shonfield(1965), p. 375, with regard to data processing equipment.

additions to capital are likely to be taken up more quickly than those requiring heavy investment<sup>1</sup>.

The ability to apply new techniques to production processes may also imply R & D outlay, and may furthermore, as we have seen, be fundamentally integrated into the wider process of product development. However, to a large extent, changes in production process may simply be attributable to the purchase of up to date machinery and equipment, thereby circumventing the need for in-house R & D.

In part the problems experienced in these respects by firms in peripheral areas may be traced to the somewhat more generalised problem of lack of management expertise in smaller firms<sup>2</sup>. At another level, however, the cost and availability of finance to undertake innovation may present serious problems for small firms, and especially those in peripheral areas.

Whilst U.K. evidence would seem to suggest that external finance is less common for small firms than for large<sup>3</sup>, small firms have only limited access to the capital market, and the most common form of loan finance for smaller firms is often bank overdrafts. Moreover, where small firms are able to obtain external finance, the cost to them will inevitably be higher than the cost to a large firm<sup>4</sup>.

---

<sup>1</sup> Cf. Thwaites(1978), p. 452.

<sup>2</sup> Cf. IIM(1980), p. 9.

<sup>3</sup> Bannock(1976), p. 66.

<sup>4</sup> Ibid. The reason is quite simple; a given project with a given probability of success will present a different risk to a lending institution depending on whether it is undertaken by a small or a large firm; the collateral and ability of absorbing losses could generally be expected to be lower in the former than in the latter.

Concerning commercial interest rates, there is also evidence to suggest that the cost of obtaining bank credit may also vary in a spatial context. In Italy, commercial rates were found to vary from 15.3% in Northern Italy to 17.3% in the mainland South<sup>1</sup>. Similar differences would also appear to exist between the South East and peripheral regions of the UK<sup>2</sup>.

Lastly, in spite of evidence to suggest that smaller firms may be more efficient in their use of R & D resources<sup>3</sup>, it remains that smaller firms have only limited access to R & D facilities.

Although some countries have shown recognition of the need to fill the innovation gap in small-scale enterprises by adopting policies to stimulate industrial R & D capacity, there are certain basic problems. According to one survey of R & D stimulation policies in the Irish Republic, neither in the foreign sector (owing to the fact that firms concentrate on the production phase) nor in the indigenous sector (owing to their small size) could any adequately developed R & D capacity be said to exist<sup>4</sup>. It was therefore

---

<sup>1</sup>SVIMEZ 1980, p. 65.

<sup>2</sup>Cf. Twaites 1978, p. 451.

<sup>3</sup>Twaites(1978), p. 449. In the sense that large firms have to spend more per invention and per significant invention than does the small enterprise.

<sup>4</sup>OECD(1978). Policies for the stimulation of industrial innovation, Vol. II-2, p. 95. This is reflected in the fact that (i) the ratio of gross exp. on R & D/GNP in Ireland was practically the lowest in the OECD area, and (ii) R & D efforts of enterprises were essentially centred in a few units (ibid., p. 83).

concluded that in general, the economy seemed unable to take advantage of government efforts in this field.

This seems to suggest that under such circumstances policy may be more effectively applied to the integration of new technologies and products rather than to the basic research process<sup>1</sup>.

It should however be stated that the Irish Republic, which is at present in the forefront of developing policies to promote innovation in small firms<sup>2</sup>, does in fact use both approaches to innovation policy.

In the first place, the Industrial Development Authority makes available grants of one-third towards the cost of work within a firm of investigating and refining proposals leading to a new product, new investment or R & D. These are

---

<sup>1</sup>See also Ewers and Wettmann(1980), p.176.

<sup>2</sup>In the Irish case defined as firms with up to 50 employees, and, in 1979, with fixed assets of less than £400,000.

Although France and Italy both spend considerable amounts on subsidising industrial R & D, there has been a notable lack of developing policies for small-medium sized firms or integrating such policies into the framework of regional planning and development. In France, the greater share of R & D grants go to large firms in key sectors — the aircraft industry alone accounted for 60% of all French public R & D financing in 1976 (see also ch. 9). In Italy the 1977 law (no. 675) for the coordination of industrial policy — mainly aimed at rationalisation and including granting and lending of investment funds and R & D support — never really got off the ground due to various factors including a change in government in 1978.

Of the major EC economies, only W. Germany appears to have developed more commercially oriented R & D policies, and shifting "from funding big projects by big companies to funding smaller and medium sized enterprises and users." Franko(1980), p. 29.

also available to medium/large scale firms<sup>1</sup>.

Secondly, through the Institute for Industrial Research and Standards (IIRS), a wide range of technical advisory services are made available<sup>2</sup>, and the institute provides valuable technological support to industrial firms wishing to expand or introduce radical changes.

The IIRS has also been instrumental in promoting new ventures. It has helped inventors by financing patenting and licensing costs, providing scientific and technical laboratory facilities, as well as searching for appropriate firms to undertake commercialisation<sup>3</sup>.

Furthermore, the IIRS has gradually expanded towards developing new technology applicable at all stages of the

---

<sup>1</sup>IDA(1979), Industrial Plan 1978-82. In 1977 the IDA backed research in 160 R & D projects and for 22 investments in research facilities, with associated investment totalling £3.1m. In 1979 225 projects were financed with a total investment of £6.4m. Over 4/5 of grant aid went to R & D projects rather than permanent research and development establishments (IDA Annual Report 1979).

<sup>2</sup>Including: technical information, cost reduction, quality improvement, standards, specialist technical testing. Furthermore, these services are provided on a next to free basis. The IIRS accounted for around 20% of total government R & D expenditure, in the mid-1970s, and its importance should not therefore be underestimated.

<sup>3</sup>Results of OECD questionnaire; see OECD(1978), p. 90.

production process<sup>1</sup>, and is thus in some sense substituting for applied R & D deficiencies in the private sector.

Finally, several recent initiatives aimed at developing the growth and innovation potential of small firms include (i) financial support for "first time entrepreneurs", including equity and guarantees for bank borrowing for working capital, (ii) a project identification programme which provides a "bank" of product possibilities to be availed of by Irish firms -- notably regarding product opportunities based on the requirements of new industries (thereby increasing the spin-off effects of new firms on indigenous enterprises), and (iii) a major programme of small advance factory clusters, over a wide range of urban and small-town sites.

In part, the success of these policies, especially in regard to the development of new and small-sized firms can be judged from the rapid employment gains made by small firms, particularly over recent years. Out of a projected 34,470 grant-aided jobs in 1979, 4,703 came from existing domestic small firms and a further 1,415 from newly established domestic small firms. Moreover, small firms accounted

---

<sup>1</sup> The conclusions of a recent OECD report suggest that this approach may be particularly relevant for Ireland and other developing regions of the EC; "... with the international diffusion of advanced technology it is obvious that the standard international scale may be too large for the domestic market in a particularly developing country ... Under these circumstances it appears reasonable to encourage enterprises to investigate ways of optimising operations other than by simply increasing scale economies. There have already been some promising results in reducing optimum efficient size of plant by changing the technology (e.g. electronics), ... (which) ... promise many possibilities for decentralisation and scale reduction." OECD(1981), see concluding remarks.

for almost one third of projected job potential in domestic industry<sup>1</sup>.

In conclusion the discussion of this section suggests that appropriate state or regional bodies may play a vital role in improving the capacity of indigenous industry in development areas to innovate and absorb technological progress.

The necessity for such action has been demonstrated by outlining the particular deficiencies characterising firms in these areas, notably (i) scarcity of high-level functions (ii) poor employment performance and high rates of firm turnover, (iii) the low propensity of externally-owned branch-plants to promote local linkages, (iv) the scarcity of adequate supplier-firm capacity arising from bottlenecks relating essentially to lack of risk capital, and organisational and management deficiencies.

#### 5.5. The business service sector as a bottleneck to innovative capacity.

A related issue which we shall briefly touch upon concerns the capacity of firms in peripheral areas to acquire professional management and technical advice, and the level of provision of these services in such areas.

From our previous comments on France it is already clear that such services tend to be largely concentrated in central agglomerated areas and that in peripheral areas the level of provision is relatively low.

---

<sup>1</sup> IDA Annual Report 1979. However, these figures may be somewhat over-optimistic - see chapter 8.

A wider level of generality is provided by the results of other studies, which emphasise the lack of availability of a wide range of business services in peripheral areas and the lack of recourse to such services by local firms<sup>1</sup>. This problem is compounded by at least two factors. Firstly, the tertiary sector, although expanding rapidly in many countries, is not generally susceptible to easy dispersal and in the case of rural peripheries tends to be centred in larger urban areas. Hence, firms in low-density rural areas may experience certain distance and information costs.

Secondly, branch plants in peripheral regions are generally limited in their use of business services<sup>2</sup>; those which are called for tend to be internalised within the corporation, and derive from head office locations, that is, primarily, outside the peripheral regions in question<sup>3</sup>.

As a result, branch plants in general do little to stimulate development of the local business service sector. Moreover, in regions where the greater part of industrial activity is controlled by such establishments, this sector may have become so restricted as to place serious constraints on the development potential of indigenous firms.

The answer to these problems lies partly in expanding the use made of business services by locally-based

---

<sup>1</sup>Cf. Ewers and Wetmann, pp. 171 and 177. Cf. IIM(1980), p.9.

<sup>2</sup>Cf. Twaites(1978), p. 453.

<sup>3</sup>Marshall(1979), p. 544 and Table 12.



firms, whose recourse to which is often markedly low especially with respect to market research, product development and financial services<sup>1</sup>.

A more tangible solution however, is to improve accessibility to such services in the form of regionally based advisory networks, very much along the lines discussed in our previous section. This would, at the same time increase the awareness on the part of local entrepreneurs of the need to integrate these skills into the development strategy of the firm.

-----

In general, the purpose of the discussion in these sections has been to outline the shortcomings and deficiencies in industrial structure characteristic of many of the peripheral regions in Europe. Specifically, we have distinguished between aspects relating to indigenous firm growth on the one hand and the impact of externally-owned plants on the other.

Although we have brought attention to certain deficiencies regarding the qualitative and linkage effects of branch plants, the main problem in this respect lies somewhat deeper. In short, corporate strategy and the integrated nature of such undertakings ensures, from the outset, that local spill-over effects will be reduced to a minimum. In conclusion, a more profitable approach to development planning might involve specific policies, delivered

---

<sup>1</sup>Cf. Marshall(1979), p. 556, cf. IIM, pp, 9-11.

very close to the firm, to enable existing enterprises to make better use of resources and adapt more quickly to technological change. Such policies, aimed particularly at small and medium sized enterprises, where bottlenecks to firm development are most apparent, would do much to improve the overall competitiveness and growth potential of this sector.

The question of indigenous firm competitiveness leads us to the broader issue of considering the overall competitive framework within which local firms in peripheral areas operate, and which in turn may place fundamental restrictions on the growth and development potential of such firms. This is the subject of our next chapter.

C H A P T E R     S I X

	<u>Unequal competition - the spatial distribution effects of strategic firm behaviour</u>	p.247
6.1.	The effects of merger/takeover activity at the regional level	p.247
6.2.	The underlying causes of acquisition activity	p.253
6.3.	Barriers to entry and market pre-emption	p.254
6.4.	The development of overall concentration and acquisition activity and the growth of the large corporation	p.263
6.5.	<u>Corporate size and competition</u>	p.267
5.1.	vertical integration and defensive concentration	p.267
5.2.	monopolistic leverage	p.269
5.3.	spatial price competition	p.271

" Although some small firms continue to grow into quite large ones, in fact, there is no evidence that significant numbers of them now actually rise to compete effectively with the largest companies. Long before small companies can exert any real influence upon the industrial structure they are generally absorbed into established large companies. "

- Bannock, "The smaller business in Britain and Germany", 1976, The Anglo-German Foundation.



## CHAPTER 6.

### UNEQUAL COMPETITION - the spatial distribution effects of strategic firm behaviour.

In this chapter we shall consider two general circumstances under which the ability of peripheral firms to effectively compete with other, often larger enterprises based outside these regions may, in a variety of respects be undermined by factors very largely outside their control.

Specifically we shall consider (i) the regional consequences of merger and takeover activity, and (ii) in the light of rising levels of concentration in a large number of sectors, and, increasing recourse to the international division of productive processes, the ability of peripheral firms to compete in both intermediate and final stages of production. Consideration of the last point(s) will entail an examination of the growth strategy of large-sized firms in these sectors.

6.1. As we have seen, many development areas in the E.C. are characterised by high levels of external ownership. It is generally more difficult however to obtain data on the growth of this process over time<sup>1</sup>. The only such study that the present author is aware of relates to the Northern development area in the UK between 1963-73<sup>2</sup>. Between these two dates, employment in externally-owned plants in manufacturing industry increased from 54.1% to 79.3% of local employment. Closer examination of the

<sup>1</sup> Moreover what there is often relates to foreign direct investment (see on). The growth of foreign-owned establishments has also been quite high at EC country level — for example in Belgium between 1968-75 these establishments increased their share of national manufacturing employment from 18% to 33% and turnover from 33% to 44%, cf. Franko(1980), p. 37 table 13.

<sup>2</sup> Cf. Marshall(1979), table 1. Figures taken from the establishment-based data bank, University of Newcastle-upon-Tyne.

figures reveals that this was due as much to a decline in the number of indigenous establishments as to an increase in those under external ownership. By 1973 the number of indigenous plants had fallen by almost one third<sup>1</sup>. What proportion of this decline was attributable to change of ownership (i.e. acquisition by externally-based firms) is not known exactly, but there are reasons to believe it may have been sizeable<sup>2</sup>.

On the face of it, there may be no reason to assume that the transfer of ownership by itself would necessarily result in any harmful effects on local industry -- indeed it may even be accompanied by rationalisation which could bring longer term benefits.

However, given the importance of acquisition activity in many EC countries, it is worth considering in more detail, (i) the regional implications of such activity and, if these are significant, (ii) the underlying explanations (at both interregional and international levels). Firstly a strong tendency towards spatial and sectoral concentration emerges from several country studies on this subject.

As one recent British study on acquisition activity noted, "the South-East dominance of extra-regional acquisitions represents a strong metropolitanisation trend in the pattern of take-overs -- in other words a transfer

---

<sup>1</sup> Between 1963-73 the number of indigenous establishments fell from 310 to 207 and the number of externally-owned establishments increased from 338 to 569. Ibid.

<sup>2</sup> Leigh & North (1978) counted 6 firm acquisitions in the Northern region over 1973/74. It is therefore not inconceivable, if acquisitions had proceeded at a similar rate in 1963-73, that up to 30 firms and a larger number of plants could have changed hands over the period considered above.

of the ownership and control of provincial firms to the South-East."<sup>1</sup>

In the case of West Germany, the number of mergers rose steadily over the 1970s -- from 168 in 1969 to 305 in 1969-71, and to 558 in 1978<sup>2</sup>. Around three quarters of these were of a horizontal nature<sup>3</sup>. Moreover, the rise in merger activity became increasingly associated with a few large corporations taking over a greater number of medium sized firms<sup>4</sup>. Given that corporation headquarters in W.Germany tend to be centred in the main agglomerations<sup>5</sup>, the metropolitan/peripheral dichotomy may well be as marked as in the British case.

Whether, or to what extent this process can be said to be characteristic of the l.d.r.'s in general, and what might be the precise competitive implications for firms at the periphery, are unfortunately matters which can only be indirectly evaluated. On this point one may note, however, that typically, the number of medium to large sized firms in high-growth sectors (such as electronics, chemicals etc.) located in peripheral regions, even when these areas are quite large (e.g. S.Italy, see back for figures), is often very small. Recalling furthermore the typically high levels of

<sup>1</sup> Leigh & North(1978), p. 236. The South-East region accounted for around one half of all interregional acquisitions (see table 4 *ibid.*), i.e. 119 out of 245 between 1973/4.

<sup>2</sup> Bundeskartellamt, Monopolkommission 1978. Several points regarding these figures should be noted; firstly the coverage is only fully complete after 1973, secondly after this date the implementation of a size threshold of immunity from controls resulted in sharp increase in the acquisition of smaller companies, thirdly the greater part of mergers in the 1970s have been of the "economic" rather than the "legal" type e.g. via share-purchasing.

<sup>3</sup> Bundeskartellamt 1979.

<sup>4</sup> *Ibid.* See also, Leigh & North(1978), pp. 236-37, vis UK data.

<sup>5</sup> EC(1981), p. 42 et seq.

external ownership found in these sectors, it seems clear that competition from locally-owned firms may, in many cases, be very limited.

However, with regard to acquired firms, the direct implications of increasing acquisition activity on the part of large metropolitan-based corporations are more tangible, and well documented. Returning to the aforementioned UK study, the main findings can be summarised as follows:

- (i) A high proportion of takeovers by firms based in the South East were made by large corporations operating at national and international levels with interests in several product markets;
- (ii) Acquisition was invariably followed by a shift of high-level decision making functions to the parent organisation, that is outside the region and notably to the South-East<sup>1</sup>. In 27% of cases the degree of management control left (i.e. at the level of routine production and purchasing functions) in effect relegated to acquired firm to branch plant status<sup>2</sup>;
- (iii) Acquisition was followed by plant closure in 33% of cases<sup>3</sup>. Furthermore in 64% of these cases, closure was accompanied by the expansion of

---

<sup>1</sup>For similar comments on foreign takeovers in France see DATAR(1974), p. 64.

<sup>2</sup>Even where a "high degree" of managerial responsibility remained, decisions regarding capital expenditures were typically limited to very small sums.

<sup>3</sup>Although to be fair, in a further 44% of cases output was subsequently increased (would this have occurred anyway?), the rather low levels of subsequent investment and employment gains, do not seem to support the somewhat optimistic view taken by the aforementioned authors on this question.



production elsewhere in the company, in many instances with machinery and key operatives being moved to expanding sites. Although rationalisation may have been the motive, it seems clear from these figures that the development potential of acquired firms is not highly regarded by acquiring firms, and in any event, comes second to overall corporate strategy;

- (iv) Around 18% of sample acquisitions resulted in a marked change of material linkage patterns. No quantitative figures are made available, hence this may or may not, be a significant figure. However, in 85% of cases service linkages were severed and transferred to the suppliers of the acquiring group, or internalised within the corporation. It is suggested that this may have led to a decline in the demand for business and production services in the peripheral regions and to a corresponding increase in the South-East.

One final point of interest is that there were marked differences in closure and expansion rates depending on whether the takeover was of a conglomerate (diversification) type, backward integrated or horizontal (in the same market). Subsequent expansion was more often the case in the first two types whilst closure was more inclined to follow horizontal acquisitions.

Whilst horizontal takeovers may partly be due to a desire on the part of acquiring firms to expand output

by a relatively inexpensive and quick method<sup>1</sup>, there is a fair degree of presumption that the more common rationale may have been to eliminate competitors in similar markets. In the UK study mentioned above we are not told what proportion of acquisitions considered were of the horizontal type. Whilst circumstances obviously differ somewhat as between countries, it may be noted by way of an example, that in the case of W. Germany around three-quarters of all mergers between 1973 and 1978 were of the horizontal type, which suggests that if any competitive distortions can be said to arise from this process, in quantitative terms, they may well be important. In particular, the observed tendency for acquiring firms (in W.Germany and the U.K.) to be very large, and in general larger than acquired or non-acquiring firms (W.Germany) might seem to place in some doubt the alternative hypothesis of pursuit of scale economies at the firm level.<sup>2</sup>

The discussion thus far leaves us in little doubt

---

<sup>1</sup> Interestingly, the recourse to acquisition for this purpose may in fact have been stimulated by restrictive controls on plant location in central areas (see Hamilton, 1978, pp. 164-5).

<sup>2</sup> See discussion in Mueller (1980), pp. 160-161; Bundeskartellamt, 1979.

It should be pointed out, however, that we are not denying the existence of such economies which may be especially important in science-based industries (Shonfield 1965). In the view of the present author, the importance of such economies at the firm level should not however be exaggerated -- although several studies point to their existence (cf. Pelkmans 1981) to some degree and at some level, (i) there is little evidence regarding the precise magnitude of their effect vis. costs, (ii) some such "economies", notably with regard to the acquisition of capital seem to offer dubious, if any, resource savings to society in general, and may anyway be a consequence of imperfect capital markets (see back), (iii) other benefits, such as "access to markets", may be "double-edged" in the sense that lower costs or increased profits may be just as much due to market dominance as to real savings such as reduced distribution costs or internal economies (see especially Scherer et al 1975 for a ranking of economies internal to multiplant firms). At the plant level, however, more evidence exists to suggest the existence of scale economies for a wide range of industries (Townroe & Roberts, 1981).

as to the negative effects of takeover activity in peripheral areas. Many of these effects are of a direct nature, however it cannot be ruled out that the corporate strategies of larger firms with respect to horizontal takeovers may be intended to increase market dominance at both sectoral and spatial levels with further, indirect negative effects on peripheral firms.

This possibility would therefore seem to merit further discussion. We should then consider;

- (i) general explanations for merger/takeover activity, and ,
- (ii) proceed to outline some of the main tendencies and effects of such activity on concentration and the development of market power/dominance.

6.2. In general, explanations relevant for our present purposes concerning the growth of merger/takeover activity can largely be split into; slow market growth (or 'defensive') arguments, and expanding market (or 'offensive') arguments.<sup>1</sup>

The first argument has to do with the product-cycle. Product markets may grow quickly at first as the product is introduced. As the product matures and imitation is possible competitors join the market, eliminating the quasi-monopoly position of the initiating firm, reducing profits and, eventually, creating surplus capacity. Firms may then be forced to liquidate, merge or implement cartel agreements. Acquisition of rival firms may be one answer, especially since this enables the acquiring firm to increase its market share without creating additional

<sup>1</sup> That is, abstracting from a number of other possible explanations - eg. the 'inefficient' firm being taken over by the 'efficient' firm; asset-stripping etc. The above discussion considers only two, very broad lines of argument.

capacity. By this means it may subsequently prove easier to eliminate excess capacity and improve profitability.

Alternatively firms may consider it preferable to look around for other ways to expand, that is, by acquisition or internal growth into more promising lines of production. Diversified mergers for these reasons, as has been noted, often take place "between large and slow growing firms and smaller rapidly growing ... firms which are in the first stages of the product cycle"<sup>1</sup>.

Hence diversification may be a determinant factor in the ability of a firm to continue to grow, or even to survive. Moreover, as we have noted, there may be a substantial premium on size in this process. As one study remarked, "in this sense concentration is not merely self-reinforcing; it is inherent in the asymptotic pattern of market growth for individual products. Unless new firms and new products come along ... concentration (will) increase both within markets and within the economic system as a whole"<sup>2</sup>.

6.3. In the second case, whilst one might not typically expect to observe a tendency towards horizontal takeovers in expanding markets, a number of arguments have been put forward to suggest that market shares of large firms in monopolistic or oligopolistic market structures will remain stable, even under conditions of fast market growth. These arguments may be important in the context of the present dis-

<sup>1</sup>Cf. Jacquemin and de Jong (1977), p. 88. This, by the way supports our earlier comments on the Leigh & North study regarding the overriding importance of corporate strategy in the acquisition and assimilation process.

<sup>2</sup>Bannock (1976), p. 63.

cussion because they imply that additional capacity may be pre-empted by existing firms, with little possibility of entry by new firms to fill the expanding market.

One approach emphasises the tendency of technological leads to perpetuate themselves. In other words, a breakthrough in a new product may prove to be only the beginning of an extended process of innovation -- the leading firm may then maintain its lead simply by keeping one step ahead of actual or potential competitors<sup>1</sup>. The "imitation" lag, in certain R & D intensive sectors may therefore be long enough to permit this type of market lead to continue, without leading firms having to resort to other measures to maintain market shares.

However, a number of other tactics may be used to create barriers to entry where size and cost advantages, rather than technological innovations, are the outstanding feature of the market. Firstly, in a static framework economies of scale may present an important barrier where the minimum-efficient scale of production constitutes an important share of total market demand. Where an optimum size firm represents a "non-insignificant" fraction of pre-entry output, post-entry profits in the industry may depend on the extent to which existing firms are willing to contract production in response to entry. The more they do so, the smaller will be the fall in price. If aggregate market demand is static it is not inconceivable

<sup>1</sup>Shonfield(1965), p. 60. One case described in this text concerns the plastics industry in which Germany and subsequently the United States maintained substantial leads "in the production and export of certain plastics, in spite of the fact that there was no secret about the underlying technology required for their manufacture." Ibid.

that price, in the short term, will be pushed down below average costs for both existing firms and new entrants. In other words excess capacity may result.

Secondly, absolute cost advantages, such that average costs of existing firm(s) are everywhere below those of potential competitors, may derive from a number of sources; better production techniques, exclusive ownership of sources of supply or of a distribution network, significant liquid funds, better spatial distribution of activities<sup>1</sup>. Resulting cost advantages to leading firms arising from such market imperfections may effectively limit the entry, or performance, of new firms for longer or shorter periods.

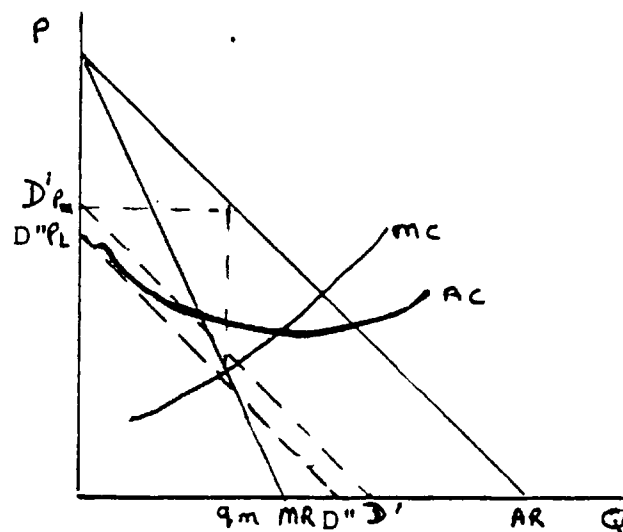
Thirdly, monopolists, or oligopolists by concerted action, may establish limit-pricing policies to effectively prevent entry of new firms to the market<sup>2</sup>. The two central assumptions of this theory are that (i) the product is homogeneous and (ii) potential entrants foresee their available market share as that portion of the market demand curve which is not satisfied by existing firms. Furthermore, it should be clear that use of such strategies becomes more likely to occur to the extent that other types of barrier(see above) do not exist to prevent entry in the first place. In other words, the 'barrier to entry' in this context arises primarily from the size of the minimum-efficient scale of production itself.\*

The basic argument is summarised in the figure below;

---

<sup>1</sup>Jaquemin and de Jong (1977), pp. 119-20. Furthermore, as these authors point out, "because of imperfections of the European capital market, industries which require large initial amounts of capital are especially well protected against entry." Ibid.

<sup>2</sup>Sylos-Labini(1957), Bain(1956), Modigliani(1958). The latter article is essentially a review and synthesis of the two earlier works. \* The present case is therefore analytically similar to the first case presented, but presupposes that firms will attempt to avoid the possibility of excess capacity developing along the lines mentioned above.



$p_m$  and  $q_m$  represent the profit maximising price and output under unconstrained monopoly\*. The "limit" or entry preventing price  $p_l$  is that price which may be maintained without attracting entry of new firms (in our example, even if these firms are equally efficient). The limit price,  $p_l$  is set so that the corresponding marginal demand curve,  $D'D'$ , is everywhere below the long-run average cost function. Under these conditions, entry will obviously not be profitable.

In general, the excess over competitive price which the oligopolists may subsequently command will tend to increase with the importance of economies of scale and decrease with market size and the elasticity of demand<sup>1</sup>.

The assumption that new entrants will restrict themselves to supplying the non-satisfied portion of demand, has however been criticised as being unrealistic<sup>2</sup>. On the other hand, as a first approximation, this analysis may not seem so unrealistic. In the short term it may prove easier to penetrate untapped outlets than to compete directly with those of established suppliers (especially if the latter have well proven distribution

<sup>1</sup> Modigliani(1958), p. 220.

<sup>2</sup> Jacquemin and de Jong (1977), p. 127.

\* In which case the marginal demand curve facing a new entrant is represented by  $D'D'$ .

and maintenance networks with security of supply) .

Secondly, in the case where new entrants do compete directly with established firm(s), market price may, under conditions of static market growth, fall to such an extent as to make the initial investment unprofitable\*.

In a dynamic context in which demand is increasing it has however been argued that monopolies or oligopolies will tend to persist, for the reason that, if market growth is foreseen, "it will always pay existing firms to pre-empt the market by establishing new plants before the time when it would first pay new firms to enter"<sup>1</sup>.

The model developed by Lipsey and Eaton essentially relates to growing spatial markets. It differs from earlier, spaceless models, in the sense that, whilst in the latter the potential for pure profits arises where the ratio of minimum efficient scale to market demand is large (and subsequently disappears as the market grows), in the spatial model, the potential for natural monopoly is undiminished even where the market grows large enough to be served by several plants.

Briefly, the argument can be summarised as follows. Initially we assume that a given firm, A, serves a market of given density by a plant located in the centre of the market ( $a_1$ ). If, at some subsequent point in time (time

---

<sup>1</sup> Eaton and Lipsey (1979). For earlier works on excess-capacity as a barrier to entry see Pashigian(1968), Needham(1971), Wenders(1971) and Esposito and Esposito(1974).

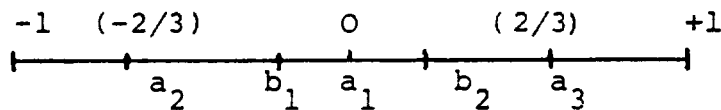
\* Of course, the possibility exists that if a new entrant can expect to be more efficient at all levels of output there may, even under these circumstances, be some incentive to push out the original producer.



$T_2$ ) demand (market density) increases, and is foreseen to increase, competition among potential new entrants will ensure that new plant will be established (at  $T_1$ ) such that the present value of the new plant(s) will be zero<sup>1</sup>. Intertemporal excess-capacity will therefore arise due to the fact that "new capital is established in the market before the increase in density that justifies its existence"<sup>2</sup>.

However, and this is the main point of the argument, it can be shown that it will be in A's own interest to block entry to the market at some time before it will be profitable for new firms to enter.

We assume that firm A is initially supplying the market in  $T_0$  with a plant at point  $a_1$  in the figure below. At some time in the future ( $T_2$ ), market density is expected to increase, which is sufficient to ensure that at time  $T_1$ , new firm(s) would establish plants in their individual profit-maximising locations (say  $b_1, b_2$ ) in each of the intervals  $(-1:0)$  and  $(0:1)$ . Although, considered by themselves, the new plants have the same



value to A as they would to a new entrant, if A does not pre-empt and new firms enter at  $T_1$ , sales and profits from plant  $a_1$  will fall abruptly after this point.

<sup>1</sup> i.e. the present value of profits earned post-market expansion will just offset the losses incurred pre-market expansion.

<sup>2</sup> Eaton and Lipsey (1979), p. 152.

Moreover, A would choose different locations from those of new entrants. Whilst new entrants would attempt to crowd out their competitor at  $a_1$  (for the reasons analysed by Hotelling, 1929), firm A would locate the new plants at  $a_2$  and  $a_3$  so that each plant would serve one third of the market. Firm A would therefore have the added advantage of firstly, placing the three plants in their joint profit-maximising locations and secondly, charging the joint profit-maximising price when it owns all three plants. As such it will pay firm A to establish the new plants just prior to  $T_1$ . Essentially, the monopoly pre-emption result can therefore be seen to derive from "the difference between the profitability of the market when three plants are owned by A, and two of the plants are owned by new entrants"<sup>1</sup>.

The order of magnitude of this advantage will obviously depend on the size of the gains to be had from joint profit-maximisation with regard to both location and prices. Under some circumstances it may even pay the firm to build the plant and leave it idle if this deters entry<sup>2</sup>. Similarly, if only a few suitable sites were available, the monopolist could acquire them and eventually use one or more as a base for when the market subsequently expanded<sup>3</sup>. Further extension of the basic argument may thus lead us to speculate as to whether there may be more than a casual link between market dominance and (firm)

---

<sup>1</sup> Eaton and Lipsey (1979), p. 153. The argument can also be extended to cover interior segments of the linear market, two-dimensional space, and a market growing in length holding the density of customers constant. See *ibid*.

<sup>2</sup> *Ibid.*, p. 156.

<sup>3</sup> *Ibid.* p. 157. This situation is not specifically allowed for in the model itself, where factor supplies are evenly distributed over the whole area.

acquisition activity in growing markets. Under such circumstances the the acquisition of smaller firms serving only local markets but with ready scope for expansion may prove easier and less costly than establishing new plants in a given area -- apart from the further advantage of eliminating potential competitors<sup>1</sup>. One might also apply this line of reasoning to markets which expand in length or spatial coverage (e.g. via integration and the reduction of tariff barriers etc.). It is notable for example, that in the North and East of France, the most common form of foreign participation by neighbouring countries has been through outright acquisition or share purchasing of existing firms<sup>2</sup>. In other words the "frontier" effect of integration may have been marked more by acquisition than by the establishment of new plants.

A last point; the above model essentially concerns markets for homogeneous products\*. However, even where product differentiation exists, one may find that earlier stages of production are subject to important scale economies

---

<sup>1</sup> Eaton and Lipsey did not extend their argument this far, and were right not to do so. Their model assumes that all new capacity is met by new plants. In the "real world" where some alternative capacity may already be in existence (e.g. (i) monopolistic pricing may provide an umbrella for smaller less efficient firms, (ii) the effect of transport costs may reduce optimum plant scale below that optimal to production alone), to the choice between installing new plant or supplying the whole area from the original plant, may also be added the alternative of acquiring existing capacity and expanding it.

<sup>2</sup> DATAR(1974), p. 25. Other particular examples along these lines may be cited; for example the foreign acquisition of a number of major Italian firms in the electric domestic appliance sector. Benettti et al (1975), p. 56. Franko (1976), p. 157.

\* Although the above arguments may in some cases apply to differentiated product markets to a greater or lesser extent, depending on the degree of substitutability between alternatives.

vertically integrated productive capacity may also help to maintain the market power of leading firms with regard to final products<sup>1</sup>.

6.3.1. In conclusion, there is no shortage of arguments, and supporting empirical evidence<sup>2</sup>, to suggest that market shares of leading firms in monopolistic or oligopolistic market structures will tend to remain fairly stable, or increase, even under conditions of fast market growth. This argument applies both to high-technology products where there are significant firm size advantages and to relatively standardised product markets, where, although scale-advantages may be of initial importance, pre-emption (i.e. plant "reproduction") may enable leading firms to maintain stable market shares, even where market size has increased sufficiently to allow for several "optimum" sized plants.

One corollary could be that expanding demand in peripheral areas may be more likely to be met by existing firms within oligopolistic structures, than by growing

<sup>1</sup> An example of these tactics being the location in Southern Italy of a large vegetable freezing complex (by Unilever) "with the effect of pre-empting competition on the Italian market by local enterprises" (Benetti et al, 1975, p. 83).

<sup>2</sup> See especially, E.C.2nd Competition Report 1972, sec. 187  
                   " 3rd Competition Report 1973, pp. 122-4,  
 and sec. 159 E.C.6th Competition Report 1976, sec. 293  
                   E.C.9th Competition Report, 1979, sec 221 a).  
 The argument is given greater generality by the observation  
 that, at the EC country level, market structures for indi-  
 vidual products "are generally oligopolistic and frequently  
 almost monopolistic", E.C. 6th Comp. Report, p. 157.

locally based firms with considerably less market power<sup>1</sup>. The ability of leading firms to establish capacity as every opportunity is unfolded, and even before, may prove the surest way of eliminating potential competition within growing markets.

6.4. Having discussed some of the causes and consequences of merger/takeover activity and the development of oligopolistic market structures, we shall follow up by considering the resulting effects in terms of conduct and performance. Specifically, we shall examine the advantages of size, and the relevant characteristics of large-sized firms in oligopolistic markets. The relevance with regard to regional development may be seen in terms of (i) resulting competitive structures and (ii) factors determining the location of direct investment by leading firms.

As one review of European industrial organisation pointed out, "within each of the national European states, there has been a spectacular increase in the number of mergers, undertaken disproportionately frequently by large companies"<sup>2</sup>. Indeed, takeover may have been "one of the

---

<sup>1</sup>Ironically, regional development policies may have even accelerated this process. For most foreign direct investments in the Mezzogiorno, state subsidies have typically covered over 50% of outlays for initial investment and plant extensions (Benetti et al 1975, p.97). Doubtless many of these companies would have located there anyway (Business International, 1974, pp.89,90). When interviewed, some even expressed embarrassment at the level of subsidies they were able to obtain compared to local firms (ibid. p. 89). Furthermore, the promotion of joint-ventures (via INSUD, the financial branch of EFIM), has greatly facilitated the installation of foreign MNEs under particularly favourable terms. Once started the foreign company has the right to acquire outright the subsidiary from INSUD, and in the case of insolvency, losses are not infrequently borne by the state (Benetti et al, pp. 34-36).

<sup>2</sup>Cf. Jacquemin and de Jong (1977), p. 71.

most frequent modes of increasing concentration in Europe"<sup>1</sup>.

Although merger/takeover activity is not by itself a sufficient condition for increasing concentration<sup>2</sup>, it can be assumed that there is more than a casual link between the two. We should then consider whether, in the EC, over the recent period of the 1970s, there have been any corresponding developments in relevant national and international operations and firm concentration levels.

In the first place it should be noted that a number of problems arise in measuring concentration levels. Definition of the geographical market may be difficult where national markets have become more or less closed-off through, for example, non-tariff barriers, product differentiation, or by concerted action of leading firms (e.g. cartel agreements). Definition of the product market may also bring problems especially due to the existence of multiplant corporations which may be classified in a number of industries. To the extent that such companies cross both national and sectoral boundaries, often undetected, "nationally based sectoral concentration ratios (will) therefore seriously underestimate real economic power"<sup>3</sup>.

Notwithstanding these caveats, the 3rd Report on Competition Policy, bringing together some forty-six comparable national reports on the development of concentration between 1962-1969, came to the conclusion that concentration(C4) ratios in 1969 were substantially higher in

---

<sup>1</sup> Cf. Jacquemin and de Jong (1977), p. 71.

<sup>2</sup> Since the latter depends also on (i) the number of new firms entering the market, (ii) the relative size and number of firms affected by such activity, and (iii) growth and their relative closure rates by firm size.

<sup>3</sup> Ibid. p. 51.

virtually all industries considered than in 1962<sup>1</sup>. By 1969, in 39% of cases, the four largest firms accounted for 50% or more of the relevant markets. Moreover the fastest rates of increase in concentration were to be found in markets where concentration was already high.

Similar studies have been carried out for the period 1969-74<sup>2</sup> with the conclusion that, for this more recent period, "concentration is fairly stable"<sup>3</sup>. Food distribution, brewing and household electrical appliances have however proved to be notable exceptions and, in some sectors, concentration has increased sharply in many countries. On balance however the Commission is perhaps being rather guarded in its comments<sup>4</sup>. This is understandable considering that there were notable gaps in some of these figures and that the period covered was particularly short. Also to be taken into account is the fact that, in certain industries and countries concentration does not increase "simply because it is already at a very high level"<sup>5</sup>.

Taking a broader view, one sees clearly that the importance of the largest companies in the EC has increased substantially since the mid-1960s -- a period which also corresponded to the start of a generalised and very sub-

---

<sup>1</sup>Op.cit., pp. 122-4.

<sup>2</sup>6th Compet. Report EC 1976. The years 1969-70, 1972 and 1973-74 are compared. Unfortunately figures relating to a number of countries and years are often missing for many sectors, and this makes comparison somewhat difficult.

<sup>3</sup>Ibid., p. 76.

<sup>4</sup>Elsewhere it states that one of the major features of the past 10 years has been that, in the markets considered, "the number of firms operating has shown a steady and striking fall." 9th Compet. Report, p. 142.

<sup>5</sup>Ibid., p. 157. Recent studies have pointed to the very high market shares of leading firms in the European market in such sectors as food, plastics and domestic appliances, at the level of specific products. 10th Comp. Report, pp. 181-187.

stantial merger wave in western Europe<sup>1</sup>.

Whereas the largest 50 companies controlled 15.4% of manufacturing output in the EC in 1960 and 1965, this share had risen to 20.3% by 1970 and 24.5% by 1976<sup>2</sup>. The top 100 companies in 1976 accounted for around 29% of EC manufacturing employment and for over 31% of output<sup>3</sup>.

As we have seen, although for the earlier period from the mid-1960s, there is a strong relationship between rising concentration and merger activity (the former generally being attributed to the latter<sup>4</sup>), the situation after the mid-1970s is less clear.

Mergers, takeovers and joint-ventures, all appear to have remained fairly stable from 1973-79 both in terms of the number of operations and firms involved and, apart from notable increases around 1975, no discernable overall trend is apparent<sup>5</sup>.

Share-purchasing has however shown a steady growth over this period, such that by 1979 share-purchases accounted for 80% of all operations\*recorded in the E.C.<sup>6</sup>

Unfortunately, separate breakdowns within manufacturing industry are not available. However, in terms of the total number of operations (national and international) undertaken between firms in this sector there does appear to have been a sharp increase in the last few years. From 1,414 in 1975 and 1,496 in 1977, the total number of

\* Comprising, share-purchase, joint-ventures, national mergers/takeovers.

<sup>1</sup> National mergers and takeovers increased from 131 in 1961 to around double this figure after 1965, settling down to 138 (EC 9) in 1973. They increased sharply again in 1974-75 (to 231 in the latter year) and have averaged between 136-146 per annum in subsequent years. Source: EC Commission, various memoranda and Competition Reports.

<sup>2</sup> Locksley and Ward (1979), table 4.

<sup>3</sup> Ibid., table 3. Interrelationships between what appear to be independent firms, such as joint ventures, financial links and formal or informal agreements, are not always easily identifiable, and it is probable that the exclusion of a number of such linkages may have resulted in an understatement of concentration in the above figures, *ibid.*, pp. 96-97 and 97 ff.

<sup>4</sup> Ibid. p. 96.

<sup>5</sup> EC Competition Reports, various years.

<sup>6</sup> EC Comp. Report 1980. In 1979, there were 1,824 national share-purchases involving 3,793 firms, and 518 international share purchases involving



operations rose to 1,592 in 1978 and 2,098 in 1979<sup>1</sup>. Whether this represents a new and significant upward trend in acquisition activity is not yet clear. What does seem clear is that for one reason or another, (minority) share purchasing has become the most widespread method of gaining footholds within or between industrial sectors<sup>2</sup>.

Certainly, it is clear that the largest industrial firms have over recent years increased their share of EC employment and output to rather sizeable levels, overall and within particular industrial sectors<sup>3</sup>.

This observation qualifies our next section which looks into the advantages and characteristics of large firm-size, and the possible associations of market power and conduct with corporate size and market structure. The discussion will of necessity be brief, and we shall merely attempt to highlight the main, relevant points.

- 6.5. In general, as to aspects of corporate size which may have important implications for competition, we may distinguish (i) vertical integration and the relationship between final good and supplying industries, (ii) market power and monopolistic leverage within and between product markets, (iii) spatial pricing and spatial competition. We shall consider these in turn.

(i) Vertical integration and defensive concentration

A number of ways in which the emergence of large companies in particular markets could stimulate further con-  
 (ctd. from last page) 1,124 firms.

<sup>1</sup>Derived from: EC Comp. Report 1979, table 6 and EC Comp. Report 1980, table 6.

<sup>2</sup>For reasons stated previously, it is quite possible that the "independent" share-purchase by two or more subsidiaries in a third firm -- which could amount to a takeover, where the subsidiaries are owned by the same company -- could go largely overlooked in the EC share-purchase figures.

<sup>3</sup>As a broad comparison with our earlier figures we may note that in the United States(1970), the top 100 manufacturing companies accounted for one third of net output and one half of industrial assets, cf. Holland(1976), ch. 5, p. 139.

centration were outlined in the Bolton Report<sup>1</sup>.

In the first place, the concentration of purchasing power in the hands of a few major companies, by increasing their bargaining leverage, may stimulate defensive concentration in supplying industries<sup>2</sup>. It is of course possible that the initial impetus will come from the supplying industries themselves, which could stimulate further concentration in the production of final products. In both cases, the competitive repercussions may be particularly negative for small firms<sup>3</sup>.

Secondly, through vertical integration, large companies or groups of companies, may establish substantial barriers to reduce actual or potential competition<sup>4</sup>. The subsequent exclusion of competitors from sources of supply or retail outlets owned by the corporation may be one such strategy. This may be achieved either by ordering subsidiaries at earlier stages of production to stop supplying to other independent firms<sup>5</sup>, or by various types of "price-squeezing" involving differential pricing of intermediate products towards independent processors and final consumers<sup>6</sup>. In the latter case the ownership of sales

---

<sup>1</sup> Committee of Inquiry on Small Firms, HMSO 1971, ch.7.

<sup>2</sup> For examples vis food retailing and baking in the UK, see Bannock, 1976, appendix 2.

<sup>3</sup> For example, "once the supplying industry is concentrated, the supplying firms will have no incentive to charge small firm customers the same (low) prices as they charge large buyers, so that small firms may have to pay higher prices than are justified by the costs of supplying small orders and will thus be at a disadvantage". Bannock, 1976, p. 62.

<sup>4</sup> Although, from the point of view of the firm, vertical integration may derive essentially from uncertainty regarding input availability or the costs thereof.

<sup>5</sup> E.g., EC Commission v/s American Commercial Solvents Corporation (C.S.C.), 1972.

<sup>6</sup> See Jacquemin and de Jong (1977), pp. 64-66. As a result, "a firm considering entry in such a vertically integrated market would have to set up operations in two stages at the same time, which raises capital requirements and increases risk", *ibid.*, p. 66.

organisations or control over distribution outlets may eliminate any subsequent possibility of arbitrage.

(ii) Monopolistic leverage

This concept, closely connected with standard analysis of industrial concentration, attempts to explain how a firm with a dominant position in one market may extend its position through diversification into other markets. Two well-known devices for these purposes are cross-subsidisation and tying arrangements<sup>1</sup>.

By cross-subsidisation a firm may use "funds from one geographical or product market, from one stage of production or even from its cash reserves to subsidize other areas of its operation"<sup>2</sup>. On the one hand this strategy may be used to "squeeze" a non-vertically integrated firm in the manner previously outlined; on the other, cross-subsidisation may be used directly to establish a dominant position in a new product or geographical market. In the latter case, the success of this device depends on (i) the existence of monopoly power/profits in the original market, and (ii) the possibility of being able to maintain its new monopoly position once established (this point has been discussed previously).

By means of tying arrangements, the purchase of a final product entails the use or purchase (normally at regular intervals) of another "tied" product. In this case, the producer may extend the dominant position with respect to the final product to eliminate competition or erect barriers to entry into the market for the tied product<sup>3</sup>. At the minimum, such an arrangement will probably give the producer a certain amount of discretion with regard to pricing of the tied product.

<sup>1</sup>See *ibid.*, pp. 88-90.      <sup>2</sup>*Ibid.*, p. 89

<sup>3</sup>For further discussion, see *ibid.*, pp. 89-90.

However, the danger of tying arrangements being used to effectively block entry for competitors, is more serious and is given specific recognition in Article 86 of the Treaty of Rome which forbids the abuse of dominant positions, mentioning tying practices as an example.

At a wider level, Vaitzos(1980) has argued that input integration now constitutes a key factor of the world economy. As such, "resource packaging", particularly by MNEs, may extend to a very broad range of fields, including: "machinery markets, technology licensing, certain consulting services, finance involved in suppliers' credit etc."<sup>1</sup>. Moreover, the overall economic power achieved by these enterprises through input tying, may turn out to be greater than the sum of the market power obtainable in each input market.

Lastly, by itself, the ability of firms to go multinational and benefit from the international division of activities, direct access to markets, and lower labour costs, may enable them to gain a competitive advantage unavailable to smaller firms<sup>2</sup>.

In relation to the preceding argument, we should perhaps stress that, although size alone is not a sufficient condition for competitive success, the mechanism of oligopolistic competition may tend to increase rather than close interregional disparities in firm development<sup>3</sup>. Although a number of aspects of this process have already been considered, we have only touched superficially on spatial aspects relating to market power and competition.

<sup>1</sup>Seers & Vaitzos(1980), p. 29.

<sup>2</sup>As the 10th EC Competition Report noted with respect to the French consumer electronics industry, "The largest firms which are in a position to establish assembly lines in the Far East and to negotiate the purchase of (pre-assembled) components from Japan, are best placed to cope ... with the wave of imports from outside Europe ... However, it has also led to an increase in concentration as smaller competitors face higher production costs because their goods, which are entirely home-produced, are being driven off the market." Ibid., pp. 185-6.

<sup>3</sup>See Holland(1976), pp. 144-5.

For example, in the context of centre/periphery relations, one might expect that firms at the periphery would in some sense be protected by factors relating to transport costs or small market size from direct competition with trading firms based in central areas. We shall now turn to consider such possibilities.

(iii) Spatial price competition

Recalling our previous discussion on limit-pricing, or price-elimination strategies, Modigliani(1958) has argued that, in a spatial context, transportation costs may well render such tactics unprofitable<sup>1</sup>. This outcome rests, however, on the assumption of uniform f.o.b. pricing, such that, if a firm has to give a discount to capture a far-off market, the same price reduction will necessarily apply to all markets.

On the other hand, another study has shown that monopolistic profit-maximisation in a spatial context is achieved "by setting non-uniform discriminatory delivered prices involving freight absorption to the benefit of more distant buyers"<sup>2</sup>. Hence, unless freight absorption is actually prohibited, Modigliani's assumption would not appear to be realistic under the market structure considered. In general, where a firm is in a monopoly position in a given geographical market, freight-absorption will enable "more distant markets to be supplied, output to be raised and profits to be expanded"<sup>3</sup>. If such action is prohibited, the monopolist may react by restricting its territory and refusing to supply more distant demand<sup>4</sup>, or where there are a few leading firms, attempt to institutionalise price alignment by means of base-point pricing.

<sup>1</sup>Op.cit., pp. 224-5.

<sup>2</sup>Philips(1976), EC Competition Studies, "Spatial pricing and competition",p.54. See also pp.31-2.

<sup>3</sup>Ibid., p. 23.

<sup>4</sup>Ibid. p. 26.

Under the basing point system, all prices are delivered prices and are equal to the predetermined base-point price plus costs of carriage, even where the seller's factory is not located at the basing point itself.

On the face of it, this system might seem likely to benefit peripheral producers who may align their prices to those of the basing point (plus carriage therefrom). However, the question must be seen in a somewhat wider context.

Firstly, base-point pricing will tend to enduce a process of geographic concentration of buyers around the basing point of the dominant centre of production. This may be especially relevant in the case of basic or intermediate products with the result that firms using these products in further stages of production may effectively be constrained to locate near the basing point for the basic product<sup>1</sup>.

Hence, although the system is generally recognised to be fairly restricted in its application<sup>2</sup> (e.g. coal and steel<sup>3</sup>), there may be a certain cumulative effect on other areas of activity.

Secondly, in the case where a new firm in a peripheral location does attempt to follow an independent pricing policy (and thereby extend the possible range of its market), "the predatory establishment of a special area price or of a basing point in that region would quickly discourage it"<sup>4</sup>. Conceptually such action might amount to the

---

<sup>1</sup>For an example of how this may occur, see Philips, op. cit., pp. 52-3.

<sup>2</sup>Typically to oligopolistic situations with price leadership, where transport costs are important, or where price cutting may have particularly unfavourable consequences (e.g. where fixed costs are high in proportion to total costs). As such base-point pricing has the advantage of "making tacit price agreements possible where explicit agreements are prohibited", *ibid.*, p. 16.

<sup>3</sup>See Article 60 of the ECSC Treaty. <sup>4</sup>*Ibid.*, p. 49.

same process of freight absorption by the market leader as analysed in our previous example.

In conclusion, where a firm has a dominant position which it exploits in a central area, freight-absorption may, to a large extent, allow price-elimination policies to be pursued even in peripheral markets. In other circumstances, the setting of a basing point near a growing peripheral market may have essentially the same effect. Under the latter system, one further effect is likely to be the concentration of linked activities around the base point of the basic product, even if production costs with regard to the latter are lower elsewhere. In general, by what amounts to tacit price-fixing<sup>1</sup>, the system is well adaptable to safeguarding the interests of dominant centres of production.

Following from these arguments, we must reject the idea that markets at the periphery are in some sense protected from direct competition or oligopolistic market pre-emption from the centre. Indeed, the growth of markets and improvement of transport structures in these areas in the past two decades may even have served to hasten this process<sup>2</sup>.

---

<sup>1</sup>Ibid., p. 53.

<sup>2</sup>For example, with respect to S. Italy after the 1960s, R. Wade (in Seers et al, 1979, p. 201) has outlined how the abovementioned factors led to a "commercial invasion" from the North and a sharp decline in employment in traditional manufacturing sectors.





## CHAPTER 7

---

The role of the large corporation in regional development - the growth of the multinational enterprise.

---

- 7.1. Structure, conduct and performance
- 7.2. MNE location and its relation to regional development
  - 2.1. the level of MNE penetration
  - 2.2 MNE location
- 7.3. European integration and industrial development - theory and practice

Part III conclusions.

Bibliography, Part III.

Note: f.d.i. = foreign direct investment  
M.N.E. = Multinational enterprise  
M.R.E. = Multi-regional enterprise  
I.I.T = Intra-industry trade



Structure, conduct and performance.

7.1. In the following sections we shall discuss further the development of the large-sized firm, its place in European industrial production, its contribution to the expansion of European trade and its relevance for the economic development of Europe's less developed regions.

We have already raised a number of questions regarding the competitive and investment linkage effects of such enterprises and pointed to their growing significance in terms of production and investment. Within the context of recent developments in international trade and production and the process of European integration, it remains to examine what effects these changes are likely to have on the framework of productive activities in the l.d.r.s and their scope for development.

As we have seen, the largest European enterprises have come to play a very important role, overall and in a number of sectors in particular<sup>1</sup>. Some of the many factors determining their growth have already been discussed<sup>2</sup>. There is little doubt however, that this trend will continue; already in the early 1960s, Shonfield(1965) had noted "that there is an increasingly important range of industrial activity, dependent on research and development of the wide-ranging type characteristic of industries in the most dynamic sectors of modern technology, which requires the support of firms which have grown beyond a very substantial size."<sup>3</sup>

---

<sup>1</sup>See Jacquemin and de Jong(1977), p. 98 et seq. "a sectoral classification shows that these big enterprises are in the same few industries; steel, chemicals, electronic equipment, vehicles, food and petroleum".

<sup>2</sup>And include, scale economies in production and R & D, economies of internalisation, cost and access to finance, diversification, and development & extension of market power.

<sup>3</sup>Op. cit., p. 374.

Furthermore various studies of such large sized enterprises suggest that, in general, "the larger the firm the greater its degree of product diversification<sup>1</sup> and the wider its geographical dispersion"<sup>2</sup>. In other words multinational production can in some sense be seen as an important, if not essential step in the growth and development of the large diversified firm. It is not by chance that "fewer than five of the continental European companies on the Fortune magazine's "200" list have no foreign manufacturing activity"<sup>3</sup>.

Moreover, in recent years the trend has been towards higher degrees of multinationality; in a survey of 403 of the world's largest industrial enterprises, Dunning (1981) found that between 1972-77, 257 had increased sales of their overseas affiliates as a proportion of the total group sales. In 103 cases this proportion had remained unchanged, and in only 43 cases had the degree of multinationality of production actually declined<sup>4</sup>.

With regard to performance, the figures are somewhat more difficult to interpret. In terms of rate of growth of sales (1972-77), both for the EC and USA, sales growth in

---

<sup>1</sup> Jacquemin and de Jong have also suggested that there may be a trend towards greater diversification amongst the largest European enterprises, both through external and internal growth. However, they also point out that the results may depend heavily on the methods used, hence one must be careful in drawing conclusions; op. cit., pp. 105-107.

<sup>2</sup> Jacquemin and de Jong (1977), p. 114. See also, op. cit., pp. 105-113.

<sup>3</sup> Cf. *ibid.* For the 50 largest European industrial companies in 1980, domestic employment in the home country averaged only 36% of total employment (around 6 million employees), which suggests that the degree of international production in these companies is indeed substantial. (Figures derived from "Vision", July/August 1981, p. 21. These figures relate to 29 of the top 50 companies, since not all, including some of the largest, gave breakdowns of domestic/total employment.)

<sup>4</sup> Op. cit., table 6.21. The results were divided up by industry according to research intensity. No essential differences emerged between these sectors taken as a whole, however, a number of sectors stand out where more than 75% of sample firms achieved higher levels of multinationality

firms where the degree of multinationality<sup>1</sup> of production exceeded 52.5%, was higher and substantially so than in any of the six lower categories<sup>2</sup>. With regard to the rate of return on sales, a distinct improvement is seen in EC firms after the degree of multinationality exceeds 22.5%<sup>3</sup>. In the USA, rates of return were uniformly higher<sup>4</sup>, and only one group stood out -- that where the degree of multinationality fell between 42.5%-52.5%, and where the average rate of return came to 10.7%.

One problem in interpreting the above figures is that the composition effects of nationality and sector may present a bias in one direction or another. However, at the level of individual industries, the findings are broadly similar<sup>5</sup>. In general, therefore, the evidence would seem to suggest that the advantages of international production do indeed show up in the performance of firms undertaking such activities -- both in terms of sales growth and in terms of profitability. This fact is without doubt important in understanding the widespread move towards international production that occurred over the period considered (mid-1970s). (ctd. from previous page) over this period -- they include electronics and electrical appliances, industrial and farm equipment, motor vehicles (inc. components), building materials, and textiles, apparel, leather goods.

<sup>1</sup> ie, overseas production as % total production.

<sup>2</sup> Dunning (1981), table 5.7 Taking 1972 = 100, the 1977 index for the USA is 289.1 as against an average (unweighted) of 186.4 for lower levels of multinationality of production. For the EC, the corresponding figures are 253.6 as against 198.0.

<sup>3</sup> Ibid., table 5.4 The highest rates of return (3.5%) were found in the categories 32.5-42.5% and over 52.5%. Below 22.5% rates of return were either near zero or negative.

<sup>4</sup> Between 2.5% and 5.4%, apart from the case cited.

<sup>5</sup> Ibid., tables 5.4 and 5.7. With regard to the rate of growth of sales the advantage of multinationality shows up, (i) for high research intensity activities where the degree of multinationality is above 52.5%; (ii) for medium r.i. activities from 42.5%-52.5% and (iii) for low r.i. activities above 42.5%.

With regard to the rate of return on sales, this advantage is in clear evidence only for high r.i. activities, for firms where the degree of multinationality exceeds 32.5%. However, sales growth may be a better indicator given that MNEs typically maximise after-tax funds available to

What, then, are the major advantages to be found in the multinational dimension? One characteristic of MNEs is the transnational mobility and control of resources. "It has the capacity to secure full and reliable information on investment opportunities beyond national borders; and it has the power to exploit differences between countries, in terms of availability and cost of labour, raw materials, capital and credit, as well as in terms of regulations, legal institutions ... At the limit the multinational firm produces where the labour cost is lowest, borrows where the cost of capital is least, sells where the prices are highest and is taxed where the fiscal burden\* is lightest"<sup>1</sup>.

Furthermore, the corporate internalisation of production and exchange may have far-reaching consequences for the countries or regions involved in the spread of such activities. Specifically, the possibilities for income remission through transfer pricing<sup>2</sup> between related parties, the corporate and spatial concentration of headquarters and high-level functions, and functional differences in the international and interregional division of labour, imply important spatial effects with regard to income distribution, technical capacity and dependence for growth<sup>3</sup>.

The advantages of size are particularly noticeable with respect to the location of activities and in relation to the development of market power.

With regard to the former, the state has often taken up a leading role in the competitive bidding for the siting of (ctd. from previous page) the firm rather than after-tax global profits (see especially, Vaitzos(1974), pp. 117-8).

<sup>1</sup>Jacquemin and de Jong(1977), p. 109.

\*See especially, Vaitzos(1974), chapter 6.

<sup>2</sup>Vaitzos(1974) chapter 6 and Seers and Vaitzos(1980), pp. 30-31.

<sup>3</sup>Vaitzos(1974), p. 118.

internationally mobile plants on home territory. For example, Seers and Vaitzos (1980), cite the case of three EC countries trying to outbid each other and entering into direct negotiations with the Ford Motor Co., for the siting of a major new plant. Even between regions of the same country, competitive bidding can be quite fierce -- the recent attempts of various development agencies, local authorities, government departments to persuade Nissan to locate in one or another DA in the UK is a case in point. Even Nissan appears to be getting fed up with this internal haggling and may eventually move elsewhere<sup>1</sup>. Needless to say, the parties likely to gain most in this process are the MNEs themselves.

In general, in spite of the fact that specific guidelines for state aids (compatible with the various EEC Treaties) have been outlined by the EC Commission, both with respect to particular industries and in general<sup>2</sup>, national governments have often remained somewhat impervious to the rules and obligations in question<sup>3</sup>.

However, the locational strategies of MNS's relate not only to the various stages of production. In particular, especially where product differentiation, national tastes, or distributive capacity are important, physical presence in a market may be essential and serve as a basis for simple re-sale operations. For example, in 1970, just over half of

---

<sup>1</sup> See The Guardian, 18 August 1981.

<sup>2</sup> For a review see EC 8th Competition Report, pp. 125-27 and 10th Competition Report, pp. 111-14.

<sup>3</sup> In 1980 the Commission took the step of writing to all Member States to remind them of their obligations especially vis Article 83(3) of the Treaty (O.J. 252, 30.9.1980). The Commission further remarked that, in several cases, "the extent of the tendency towards non-notification would appear to indicate the possible existence of a general decision not to respect the provisions in question". EC 10th Compt. Rep. point 162.

United States MNE exports to majority-owned affiliates in the EC were for resale purposes without further processing<sup>1</sup>.

This observation leads us to consider some of the more obvious implications for competition. Whilst on the one hand the entry of new foreign firms through f.d.i. or resale operations (i.e. "exports") may have the effect of breaking up local oligopolistic/monopolistic structures and restricting the market power of local leading firms<sup>2</sup>, there is also the possibility that the same operations may merely extend abroad the dominant positions occupied at home.

In this respect, two comments of the EC Commission on recent trends in the development of concentration and competition are worth noting<sup>3</sup>;

- i) a tendency towards the internationalization of firms, markets, products and consumer habits at Community level; the same transnational firms are coming more and more to occupy the same places in the same product markets in more than one Member State; and,
- ii) the development of a new form of oligopolistic specialization at transnational level in which elements of competition are closely bound up with elements of technical or commercial cooperation and quasi-monopolistic rigidity.

The effects on competition may be felt both with respect to trade and f.d.i. In the first place, once there is market power abroad as well as on the home market a firm or group of firms may take advantage of their position by raising the industrial price of the product<sup>4</sup>.

In general, as Caves(1974) has pointed out, "the disci-

---

<sup>1</sup>Seers and Vaitos(1980), p. 32.

<sup>2</sup>See especially, Jacquemin(1981), pp. 4-8.

<sup>3</sup>EC, 9th Compt. Report, pp. 142-43.

<sup>4</sup>In this sense exports may increase overall profitability with export profits being eventually higher than domestic profits. As a result, as Jacquemin(1981, pp. 10-11) has pointed out, whilst the benefit to the monopolist is less than the cost to the international community, from the national point of view there may be a gain, and hence, the likelihood that governments may even encourage such activities.



plining force of trade flows is probably less when product differentiation is present, but it is in just those circumstances the multinational firm becomes a more prominent actor"<sup>1</sup>.

With respect to f.d.i., internalisation of the productive process may lead to greater overall economic power in the manner described in previous sections. In product markets, it may also represent a step towards the extension of market power beyond home boundaries. In particular, " the decision to establish a subsidiary in a national market ... is clearly a rivalrous or independent move. Even if the parent was previously exporting to the market, local production facilities make it a more effective rival and a greater threat to other sellers"<sup>2</sup>. One result may be to encourage defensive mergers on the part of national firms<sup>3</sup>.

Although not exhaustive, the above arguments may give some explanation of the trend observed by the EC Commission, towards the increasing presence of MNEs in individual product and national markets.

---

<sup>1</sup>Op. cit., p. 26.

<sup>2</sup>Caves (1974), p. 25.

<sup>3</sup>Ibid., p. 26.

7.2 Having discussed some of the locational and competitive aspects of the MNE, we shall now turn to consider some of the more direct implications for the less-developed regions of the EC regarding location and industrial linkages of branch plants and subsidiaries.

Once again, and due to the nature of the MNEs themselves, many of the developments underlying the geographical spread of subsidiaries must be seen in an international context. However in this context, neither trade theory nor gravity models in location theory would appear to provide any adequate explanation for the impressive surge in subsidiaries and f.d.i by continental MNE's since around the mid-1960's.<sup>1</sup>

As Franko(1976) has pointed out, it was more to be expected that the large proportion of European plants with capacities of around half that of their USA counterparts in the 1950s would make way for larger and more specialised units. "In sum, it was increases in international trade -- rather than in intra-regional investment -- that were contemplated".<sup>2</sup> As it turned out, "it was indeed in some of the industries in which the minimum economic scale of production is said to be greatest, that continental European enterprises were establishing the largest number of manufacturing subsidiaries in the EEC"<sup>3</sup>.

In other cases, such as electrical appliances and motor vehicles, at least in the early years, developments were characterized more by growth in intra-EC trade<sup>4</sup> than by the

---

<sup>1</sup>See Franko (1976) esp. p. 135, R. Burmanjer, EUI, Dept. Economics Workshop paper 1981. Note: for the 1970s the EC Commission no longer gives figures for unilateral "one parent" subsidiaries. However, figures on the development of penetration of MNEs in manufacturing industries in EC countries give strong support to the hypothesis that this trend has continued well into the 1970s (see on).

<sup>2</sup>Cf. Franko(1976), p. 140.

<sup>3</sup>Ibid., p. 141.

<sup>4</sup>Cf. Meyer (1978) ,p. 180.

spread of manufacturing subsidiaries. Also noticeable in these sectors, however, was a growing tendency towards the relocation of activities among EC countries<sup>1</sup>. With respect to household appliances, in particular, the "common market" effect was also characterised by a fair amount of strategic "pre-emption" by market leaders at the EC level<sup>2</sup>.

Resulting from takeovers and the spread of (MNE) f.d.i., it is probable that at least part of the intra-industry trade in this sector can be attributed, in the first place to plant specialisation and product concentration, and in the second place to intra-firm trade.

Moreover, with the growth in MNEs and the internationalisation of production in general, it is probable that this outcome is also typical for a fairly wide range of industrial sectors.

Supporting evidence for this theory is given by a recent study of exports from foreign-owned establishments in France (1976)<sup>3</sup>, where it is shown that such establishments have a particularly high propensity to export back to their home country. In fact, for most EC countries (with the exception of the UK), the home country proved to be the single most important destination for exports from French-based subsidiaries.

For example, the share of output exported by MNE subsidiaries\* located in France ranged from 8.1% to 19% -- on average around three quarters of which being to EC or other W. European countries. Most notably, for W. Germany and Belgium/Luxembourg respectively, 8.4% and 4.6% of output from

---

<sup>1</sup>Cf. Franko (1976) , p. 156.

<sup>2</sup>From the late 60s to early 70s two examples are of note: firstly the acquisition of Ignis (Italy) by Philips and, secondly, the proposed acquisition of Zanussi (Italy) by AEG which was prevented by the German Cartel Office "out of fear that AEG would then have had control over much of the cheap Italian imports that were holding down prices in the German market". Cf. Franko (1976) , p. 157.

<sup>3</sup>INSEE, Economie et Statistique, June 1980, pp. 9-27.

\*Belgium/Luxembourg (16.2%), Netherlands (8.1%), W. Germany (19.0%), Italy (13.1%), UK (13.7%).

French located subsidiaries was destined for the country of origin\*.

As such these figures would seem to reflect a "frontier" integration effect arising from the relocation of certain activities to lower cost locations; and being stronger for countries which are geographically closest and between which labour-cost differences may be most marked. Hence for France, MNEs based in W. Germany and Belgium/Luxembourg take most advantage of these possibilities whilst UK and Italian MNEs do so to a lesser extent and have a lesser interest in so doing. When MNEs from the UK and Italy locate in France, market considerations are probably of overriding importance. Whilst this may also be the case for W. German and Belgian MNEs, the attractiveness of locating certain activities in nearby, lower-cost locations is clearly more pronounced.

On the other hand the evidence is that UK firms are not entirely out of this process. As a low-cost export base, the Irish Republic appears to be more attractive, and not only for UK firms. In 1974 for example, newly established UK subsidiaries based in the Irish Republic exported 21% of total sales back to the UK (around 77% of which in the form of sales to affiliates)<sup>1</sup>. Subsidiaries from the E.C.<sup>§</sup> as a whole, exported over 16% of total sales back to the E.C. and a similar proportion of sales to the UK<sup>\*\*</sup>. On average, exports of foreign-owned enterprises accounted for over 86% of their total sales.<sup>2</sup>

In some sense, therefore, the locational<sup>§§</sup> advantages of the regions at the European periphery, in spite of their

---

\*For Italian subsidiaries the figure was 2% and for the Netherlands 1.5%. Figures derived from *ibid.*, table 8.

\*\*Sales to affiliates of EEC(7) subsidiaries, averaging a somewhat lower share of total exports, i.e. 29%.

<sup>1</sup>Figures derived from McAleese(1977), tables 4.3, 4.7 and 4.9.

<sup>2</sup>Vis. Italy, see Business International, p. 17 et seq. The survey concludes that, "most companies invest in the Mezzogiorno either to supply the major Northern Italian markets or to establish an advantageous export base." This is confirmed by Benetti et al (1975), who estimates that 80% of foreign-owned plants in the South use it predominantly as a base for export to the centre/north or abroad.

§ less Ireland and the U.K.

§§ including tax incentives, regional policy, etc..

distance from central markets, make them an attractive "springboard" for direct exports or intra-firm transactions for companies which have the capacity to undertake production on an international scale.

Whether such developments are entirely beneficial to the l.d.r.'s themselves in a medium/long term framework, or whether they are in fact preferable to any alternative strategies for regional development, is of course an important question. It is also one that should be considered before looking more closely into the locational strategies of multinational corporations. Much effort has been spent on attempting to answer the controversy of whether the location decisions of MNEs on the whole help to strengthen or weaken the agglomeration forces in the spatial structure of industrial development (Yannopoulos and Dunning, 1976, Holland 1976, Blackburn 1978, O'Farrell 1980). However, even if it is possible to provide unambiguous answers, there remains the question of which of the two outcomes is to be preferred. In other words an assessment of the locational patterns of MNE subsidiaries cannot be divorced from an assessment of the benefits or otherwise from the impact of such plants on their local environment.

We have already discussed at length some of the problems and drawbacks associated with this type of "dependent" development. Recalling these arguments would however lead us to conclude that at a spatial level qualitative rather than quantitative considerations are probably more important as concerns the aims of regional development at the periphery. Hence, any quantitative analysis of MNE plant location must necessarily be plagued with caveats as to the exact medium/long term benefits of the operations in question. Nevertheless, given the extent of such operations in the EC, it is

important to analyse some of the main spatial developments.

### 7.2.1. The level of MNE penetration

In general, the share of industrial activity accounted for by firms under foreign control has increased to quite sizeable proportions for most EC countries over the course of the past two decades. In France, for example, foreign establishments increased their share of industrial turnover from 8% in 1960 to around 26% in 1973<sup>1</sup>. In Belgium this share increased from 33% to 44% from 1968 to 1975 alone<sup>2</sup>. Although in France, around 42% of this total was accounted for by US affiliates, the evidence suggests a shift towards investments originating from the EC<sup>3</sup>.

For most countries the level of penetration varies somewhat between industrial sectors. The following table gives a breakdown of the degree of foreign penetration in W. Germany, France and Italy for the industrial sectors where foreign penetration was highest.

Share represented by enterprises with foreign participa-  
tion for several industrial sectors.

Sector	W. Germany I %	France II %	Italy III %
Manufac. ind.	25.1	21.0	21.3
Food & bev.	19.3	n.a.	21.6
Chemicals*	43.5*	38.3*	23.1
Mech. engin. (elec. eng. & elec.)	25.3**	22.1**	24.8
	-	34.5 <sup>†</sup>	-

I = share of gross output where foreign participation above 20%, 1972.

II = " " " " " " " " 50%, 1973.

III = sample of 828 companies. Capital held by non-residents as a percentage of the total capital of the large companies (1973).

\*Inc. rubber and plastics <sup>xxx</sup>inc. electronics + employment figures (1973)

Source: OECD(1977) Penetration of MNEs in manufacturing industry in member countries, pp. 15, 49, 71.

<sup>1</sup>Seers & Vaitos(1980), pp. 164-65. <sup>2</sup> Franko 1980.

<sup>3</sup>Seers & Vaitos(1980), table 9.10. The proportion of EC direct investment to total f.d.i. in France increased threefold between 1966-1971. cont.

No detailed figures are available for Ireland, however, some of the trends observed in other countries are also in evidence here, particularly with respect to electronics and electrical engineering<sup>1</sup>. This sector is particularly important and has been well at the forefront in terms of employment gains for many of the EC peripheral regions in France, Italy, Ireland and Scotland (see chapter 5). Moreover, the role of MNEs has been particularly notable even in regions where the degree of foreign penetration has otherwise been very low<sup>2</sup>.

#### 7.2.2. MNE location.

From the evidence available it is not entirely clear whether, on the whole, MNEs tend to prefer central locations to development areas, to a greater or lesser extent than comparable domestic enterprises.

Evidence for the UK and Ireland would seem to suggest that foreign firms are marginally more inclined to locate in D.A.s than domestic firms<sup>3</sup>. On the other hand, Blackburn(1978) has concluded that, in general, "an examination of the actual locations selected by MNEs in North America and W. Europe suggests that MNEs do contribute to regional

---

(ctd. from previous page) (DATAR, 1974, p.126). In terms of investment, EC firms have been more important than US firms since 1968.

<sup>1</sup> At present the electronics sector alone employs around 14,000 persons in Ireland, almost all of which is attributable to the influx of new overseas firms in the past six years. In 1979 alone grants were awarded to overseas new projects involving around 7,000 new jobs. I.D.A.

<sup>2</sup> The degree of penetration (majority-owned affiliates of over 200 employees, 1973) in this sector is particularly notable in many of the French DAs; between 20 and 29% in Aquitaine, Basse Normandie, Bretagne, Limousin and (electronics only) around 90% in Auvergne and Languedoc. DATAR, 1974, ch. 2.

<sup>3</sup> Vis UK, see Howard(HMSO 1968). Between 1960-65, 44% of interregional moves originating from the UK went to Development Areas. The figure for movements originating from abroad was 54%.

Vis Ireland, see O'Farrell(1980). Between 1960-73, 58.9% of MNE branch plants set up in Ireland were located in DAs compared with 48.9% of the branches of Irish multiplant firms.

disequilibria in many countries"<sup>1</sup>. Some countries appeared to be attracted by 'core regions' to a greater extent than others, however this may also have been due to factors such as type of investment/sector and proximity to the investing country (see on). For example, as O'Farrell in the Irish study pointed out, "results indicate that the number of plants per town by town size group is independent of region"<sup>2</sup>. Similar results were found for Italy, where over 70% of employment in foreign-owned plants in the South was located in the regions attached to the agglomerations of Rome and Naples<sup>3</sup>.

Although, then, there are certain problems involved in correctly interpreting such global figures, in another sense, the orders of magnitude by themselves stand out. In France (1971), for example, over 34% of total employment by firms with foreign participation was located in the Paris region, whilst this region accounted for less than 24% of total industrial employment. However the figures suggested that this 'core region' was equally attractive to most major investors, in contrast to Blackburn's findings<sup>4</sup>.

Particularly interesting for France, was the propensity of foreign investors to locate in regions near or adjacent to the home country. Hence, whilst the largest US plants (outside Paris) were spread fairly evenly over the whole ter-

---

<sup>1</sup>Op.cit., p. 125. The figures used relate mainly to the late 60s.

<sup>2</sup>Op.cit., p. 148. "Hence locational discrimination by industrial investors in Ireland -- both indigenous and foreign -- is much greater with respect to town size than region."

<sup>3</sup>Benetti et al(1975), p. 44, i.e. Lazio (Cassa zone only) and Campania.

<sup>4</sup>Derived from DATAR(1974), table 6. Similar proportions were observed for investments originating from W.Germany, Netherlands, USA and UK -- only Belgium/Luxembourg showed a more dispersed pattern with 14% of employment located in the Paris region.



ritory, plants originating from Belgian, Luxembourg or Dutch companies tended to be concentrated in the northern part of France; those of W. German origin towards the N.East, and for UK plants around the North and N.West<sup>1</sup>.

For some regions the level of foreign penetration has been quite high (up to 90%) in fast growing high-technology sectors such as electronics. In certain cases, regions as a whole have become very dependent on foreign capital. This is particularly noticeable in Alsace, where between 1953-70 around one half of new jobs came from foreign establishments, most of which originating from W. Germany<sup>2</sup>.

Even in the peripheral regions of the South West, where foreign penetration was typically low around 1970, there have been some notable inflows of foreign investment in more recent years. In Aquitaine employment in existing foreign-owned establishments more than doubled between 1969 and 1975, and in Midi-Pyrénées between 1967-72 over 50% of new jobs and around 26% of aided investment were accounted for by the foreign sector<sup>3</sup>.

In general however the impact of foreign direct investment on the local economic environment has left much to be desired. In addition to some of the points previously raised on this subject, we may briefly list some of the conclusions of the DATAR study for France:

---

<sup>1</sup>Ibid., table 8 and map 4. For Belgium/Lux. and the Netherlands 63% and 40% of employment in foreign subsidiaries was located in Nord, Picardie, Champagne and Hte Normandie; for the UK 58% of employment was located in Nord, Picardie, Loire, Normandie; for W. Germany 64% was located in Champagne, Lorraine and Alsace.

<sup>2</sup>Ibid., p. 52.

<sup>3</sup>Ibid., pp. 52, 63.

- i) Qualifications; for example in the Nord region it is noted that "even the most recent implantations which are for the most part in fast-growing sectors (automobiles, chemicals, electronics) mainly concern jobs in production lines or assembly. Qualified jobs only concern management and maintenance"<sup>1</sup>. Similar reflections are made for Aquitaine and Poitou-Charentes. In general, female workers are estimated to account for around 30% of the average workforce.
- ii) Wages and salaries; in general these are rarely below the regional average and, normally, for equivalent skill levels, are about 5 to 7% higher. In part this may be due to the need<sup>2</sup> to attract local labour from-existing enterprises<sup>2</sup>.
- iii) Linkages; in general, <sup>regional</sup> inputs account for less than 10% of branch plant requirements. This is in part due to the organisational structure within which these plants operate, and in part due to the type of activity. However, it is notable that in many cases, long-established foreign plants tend to have purchasing policies not unsimilar to equivalent French enterprises. As a general observation, the volume of subcontracting delegated to local firms is in most cases very limited<sup>3</sup>.

#### Regional incentives and MNEs

We shall briefly consider what are the factors influencing the location decisions of MNEs and how they perceive or are influenced by regional development policies.

The evidence on this subject is very limited and, in general, open to a fairly broad level of interpretation.

The previously mentioned Business International Survey of foreign investments in Southern Italy, for example, came to the conclusion that "incentives are rarely, if ever, the

---

<sup>1</sup>Ibid., p. 54.

<sup>2</sup>Ibid., p. 55

<sup>3</sup>Ibid., pp. 59-60.

decisive factor in choosing to locate in one country rather than another"<sup>1</sup>.

Evidence for the UK would generally seem to support this argument<sup>2</sup>. From the Italian survey, it would appear that the importance of incentives is largely in guiding investment to the South, "once the basic decision has been made to invest in Italy"<sup>3</sup>. As such, regional incentives may serve to offset most of the perceived or real additional costs of operating in a more distant location (e.g. viz transport costs, training costs, infrastructure etc.).

One point of note was that the 10-year tax concession on company income (including grants) and profits was generally rated of equal or greater importance than investment grants and loans; even though in most cases the latter financed over 50% (and often over 75%) of the investments for which detailed information was provided<sup>4</sup>.

It is also possible that the delay involved in the disbursement of grant funds<sup>5</sup> substantially reduced their perceived or effective value, especially in relation to other incentives which appeared to be more or less automatic in their operation.

In general, the value of tax incentives will be greater the higher the level of profitability of the enterprise. From our earlier remarks on the performance of firms by degree of multinationality we may deduce that MNEs may be marginally more responsive to such concessions than domestic firms. This influence will obviously depend on country and

---

<sup>1</sup>Op. cit., p. 90.

<sup>2</sup>Cf. Holland(1976), pp. 152-53.

<sup>3</sup>B.I. (1974), p. 33.

<sup>4</sup>Ibid., p. 30 et seq.

<sup>5</sup>Ibid., p. 84, often between 1 1/2 to 2 years, although this situation seems to have subsequently improved (see Yuill, 1980, p. 154).

sector of investment, however, if we note for example that the average rate of return on US manufacturing investment in Ireland between 1974-79<sup>1</sup> came to 29.4% (and for the EC as a whole 15.5%), the case is given somewhat greater generality. In particular the Irish figures must be seen in the light of an array of tax incentives including (i) export-profits tax relief (at 100% for 15 years; this has now been replaced by 10% corporation tax); (ii) no restrictions on repatriation of capital and profits; (iii) double taxation agreements with all major industrial countries.

Although rebates on social charges were also mentioned by many firms as being important in the location decision, as Holland (1976) has suggested, their importance is likely to be less in relation to MNEs as compared with domestic firms. Where labour costs are a very important factor MNEs will probably prefer an l.d.c. location to a l.d.r. even if labour subsidies are available. Domestic multiplant companies which do not have access to very low-cost labour abroad are therefore more likely to be influenced by regional subsidies to wage costs, especially for the location of more labour-intensive processes.

Whilst labour subsidies may induce the MNE to locate its relatively labour-intensive processes in peripheral regions of the EC, the case is not at all clear. Labour availability or other factors may be more important - as we have seen, France and Ireland for example, have experienced this phenomenon without recourse to labour subsidies. Indeed, it may be the case that, for MNEs at least, too much attention has been placed in the past on the question of whether capital or labour subsidies are better suited to attract employment and labour-intensive operations to the l.d.r.s. A more

<sup>1</sup>US Department of Commerce.

pragmatic approach based on an analysis of corporate strategy and planning would probably give more accurate and realistic conclusions.

In a general way, grants, loans, labour subsidies and tax concessions may all be internalised within the structure of the multinational corporation. As such, the surplus from regional incentives derived from one sector of activity can easily be transferred to other operations or investment elsewhere<sup>1</sup>. If this is the case then MNEs may pay more attention to the overall value of subsidies (in which as we have seen, tax benefits play an important role), rather than in the particular weighting of capital/labour subsidies. If labour costs are really important then l.d.c.s locations will anyway be preferred, and it makes little economic sense to provide a blanket labour subsidy (normally at very high costs, see chs.8&9) to attract a handful of labour-intensive operations that might have been better located elsewhere.

Lastly, if, as several studies have revealed, market opportunities are a far more important consideration in MNE location decisions than regional incentives, it is worth pondering on whether the very high levels of subsidy operating in many peripheral areas<sup>are</sup> not unduly high, and possibly reflect a certain amount of outbidding by the countries involved?<sup>2</sup>

It is debatable whether, in general, sufficient importance has been attached to the way incentives work and are perceived and the way they could be improved. Certainly, however, the efforts of the EC Commission to coordinate incentives and impose ceilings are a step in the right direction to avoid outbidding and safeguard competition.

---

<sup>1</sup> See Holland(1976), for evidence.

<sup>2</sup> For further discussion, see chapters 8 and 9.

### 7.3. European integration (Customs Union) and industrial development -- theory and practice

As a point of departure, one way of understanding the differential effect of a Customs Union on developments in productive capacity and organisation, is to take as an example the differences in the impact of free-trade in industrial goods and agricultural products. Whilst free trade has been generally welcomed in the former it has been rigorously avoided in the latter, and the C.A.P. is certainly no exception.

This fact should not however be surprising. Free trade in agricultural products where goods are more or less standardised and markets are highly competitive, would inevitably lead to low or falling agricultural prices.

Even more so, since prior to the implementation of the C.A.P. various levels of protectionism and large differences in support prices were to be found in all member states.

Hence even with a common external tariff, competition within the community was likely to be strong, implying significant structural adaptation.

As it happened, the initial set of prices agreed on by the Six was eventually undermined when first the Franc was devalued in 1969 and later the same year, the DM was revalued.

The problem occurred because common prices were set in terms of the unit of account (= 1\$ U.S.), so that when a member state changed the par value of its currency, it automatically changed its domestic agricultural prices, given unchanged dollar prices. The solution was a system of compensatory taxes and subsidies. By 1978, the result was that prices for agricultural products within the C.A.P. varied by as much as 60% (in terms of nominal exchange rates) between member states of the EC<sup>1</sup>.

---

<sup>1</sup>"The Agricultural Situation in the Community 1978", EC Commission.

It should however be emphasised that this state of affairs was not foreseen in the Treaty of Rome, where it appears that by and large, the same rules relating to free competition (one market) in industry (esp. arts. 9, 12) were also intended to govern agricultural markets (arts. 38-47, especially, art. 38(2), art. 44(2), art. 45(2)).

In the case of manufactured goods the impact of trade led integration was quite different. Basically, the expectations<sup>1</sup> were that free trade would lead to inter-industry specialisation -- industries situated where costs of production were lowest would expand, and where costs were highest whole industries might face the prospect of elimination.

Regional imbalance could result since a disproportionate share of adjustment would be inflicted upon countries or regions at a lower stage of development.

As it happened, the outcome was somewhat different. Instead of countries specialising in different industries, and the composition of their exports to other EC members becoming increasingly different, the opposite occurred and their exports became increasingly alike<sup>2</sup>. Trade creation in the E.C. was therefore largely of the intra-industry type.<sup>3</sup>

Once again, the explanation is not surprising given the nature of production and market conditions for differentiated manufactured goods.

Given increasing returns to scale and length of production runs, for individual products, firms in an industry will tend to specialise in a narrower range of types or models.

In the Canadian case, for example, Lerner (1973) has shown how adjustment to free-trade is characterised by rationalisation, and a shift from using plants to produce a large variety of goods, to a few or even a single good. As a result,

<sup>1</sup>Viner J. "The Customs Union Issue", 1950, ch. 4. See also Belassa B. "Tariff reductions and trade in manufactures among the industrial countries", A.E.R. June 1966, pp. 466-73.

<sup>2</sup>Meyer, F.V. (1978), p. 180.

<sup>3</sup>For example I.I.T. as a percentage of total intra-EEC trade rose from 53% in 1959 to 65% in 1967. See Grubel & Lloyd (1975) 70.9% of the increase in total trade over this period took the form of an increase in intra 2-digit industry trade, p. 135.

exports can be produced with greater scale economies and lines that are no longer produced may simply be imported.

Moreover, the high cost of entering the market for technologically advanced products makes it impossible for firms to do so over the whole product range.

Since the market life of such products relative to their R & D stage tends to be short, firms will be eager to recoup their initial outlay as soon as possible. Under such circumstances firms may prefer freer access to international markets to protection of the home market.

The reason for this is that they are operating under a time constraint and will be anxious to reach large markets before the product moves into later stages of the product cycle<sup>1</sup>.

In this way the creation of a free trade area or customs union, by providing access to wider markets will tend to promote specialisation within industries and the growth of intra-industry trade. The scope for such specialisation obviously varies somewhat from industry to industry. However, as we have seen, it was especially from activities where such scope existed that came the main growth of intra-EEC trade<sup>2</sup>.

Whether increased specialisation would have occurred in the absence of a customs union is an interesting question. Certainly the reduction of tariff barriers helped to speed up the process, however it can be argued that I.I.T. specialisation was already increasing before this period. As we have seen, the growing importance of technological factors, by itself, would have implied greater specialisation in the production process. On the other hand it is clear that such developments would have been frustrated had international trade not become freer, since market size is yet another important factor in the incentive to specialise.

---

<sup>1</sup>Shonfield(1965), p. 60.

<sup>2</sup>F.V. Meyer, p. 180. Mainly machinery, transport equipment, chemicals and "one quarter of the trade in consumer goods".



Comparing the share of I.I.T. in the expansion of the trade among the EEC countries, with the corresponding share in the expansion of their total trade with non-member countries<sup>1</sup>, does, however, tend to give support to our hypothesis that trade liberalisation did in fact speed up the process of intra-industry specialisation.

We shall now consider in more depth the regional significance of the preceding discussion. As we have noted, "intra industry specialisation results in the retention of more industries than under inter-industry specialisation"<sup>2</sup>.

Following from this analysis one could argue that "regional development strategy should permit all countries to have each of the prestigious and basic industries ... with the important difference that each country will produce only a relatively small number of products of each 'industry'"<sup>3</sup>.

On the other hand, joining two economies at rather different stages of development could just as well result in a reduction in the total number of products available at equilibrium; whilst under autarky, trade restrictions may prevent direct competition between essentially similar products, if more goods enter when free-trade is established, price competition could lower the prices of competing "higher-quality" goods down to a point at which similar "low-quality" goods would no longer be preferred. As Jacquemin (1981, p. 14) has concluded, "the still very limited theoretical perspectives suggest that there are potential gains from trade in terms of product variety, but that these gains are not at all automatic."

However, the regional implications of increasing specialisation become more worrying when we consider the type of firm and market conditions which typically prevail under these circumstances.

<sup>1</sup> Grubel & Lloyd (1975), p. 136. 70.9% as against 60% respectively for the period 1959-67.

<sup>2</sup> Ibid., p. 131.

<sup>3</sup> In this sense, specialisation would be based on "comparative advantage that may be traced to cultural and historic reasons"; *ibid.*, p. 147. See ch. 7 of *Ibid.*, for full analysis of this point.

Since in some industries R & D is a bar to entry due to the effort and know-how involved, and because R & D itself is an expensive process, firms may tend to concentrate on the technological subdivision of activities rather than try to cover the whole field of possibilities.

A large-sized firm however, has certain advantages in this respect. Firstly it is more able to undertake the fixed costs (and risks) involved in R & D activities.

Secondly, it may circumvent the process by which R & D efforts might imply a narrowing of its product range -- there are several ways of doing this; (i) production can be rationalised by using a higher proportion of standardised components, hence more effort can be spent on the final product, (ii) it may buy in the rest of its former range from other firms at home or abroad<sup>1</sup>, so that it may still continue to supply the market with the whole range, (iii) similar to (ii), a firm may locate some of the more established production lines (where price competition becomes increasingly important), in developing countries where labour costs are lower and tax and transfer-pricing advantages are to be had.

Such tasks are hardly within the scope of small-sized firms. Whatever the explanation, it is certainly a fact that exporting has become increasingly dominated by large sized firms in most industrial countries\*

For example, in the UK (between 1971-1974), it has been estimated that less than 4% of all exporting enterprises (i.e. 933) accounted for over four-fifths of UK exports<sup>2</sup>.

In France in 1974, 300 enterprises accounted for two-thirds of French exports, 120 for half and 65 for 40%<sup>3</sup>.

Also, the largest exporters were in most cases multinationals. In the UK, only 8 of 244 firms with an export turnover above £ 10m. in 1974, had no overseas investment links<sup>4</sup>.

The problems that such concentration may present for regional development have been extensively considered in pre-

---

<sup>1</sup> F.V. Meyer, p. 42.

<sup>2</sup> Ibid., pp. 30-32. 92 enterprises accounted for exactly half of total exports. \* See esp. viz export concentration in Italy;

<sup>3</sup> Ibid., p. 31.

Banco di Roma, Review of Economic Conditions in Italy, Feb. 1980, pp.41 ff.

<sup>4</sup> Ibid., p. 33.

vious chapters and by S. Holland(1976). Apart from doubts we have already expressed as to whether trades dominated by such large firms may be conducted under conditions resembling p.c., there are further reasons to doubt whether the l.d.r.s will in general benefit from this process.

By going multinational rather than multiregional, firms may obtain labour at a fraction of the wage level existing in even the lowest cost locations in the EC<sup>1</sup>. Moreover, they may also obtain tax advantages and government aids on a scale unobtainable even in the most favourable regional locations in Europe. In other words, when such enterprises do relocate they may well prefer an l.d.c. location to an l.d.r. location inside the Community. Even when new production is from E.C. based plants, proximity to central management or research staff is often an overriding factor. Hence, central locations, at least where skill requirements are high, tend to be preferred.

On the other hand, "multinational companies are in a weak position to claim that they cannot afford to locate major initiatives in Development Areas"<sup>2</sup>, especially since most of them already have substantial experience of dispersed multi-plant management and the organisation of "global transport on what amounts to a pipe-line basis"<sup>3</sup>.

Even so, it is not beyond the scope of such firms to threaten to invest outside the country when pressured by national disincentive policies to locate in a development area<sup>4</sup>.

Although a discussion of deglomeration policies is mainly reserved for later, it should by now be clear why several writers (and indeed governments) advocate a type of 'Programme Contracts' system where leading firms are supposed to submit their major investment programmes for negotiation between the firm and Ministry concerned<sup>5</sup>.

<sup>1</sup>Ibid., p. 152

<sup>2</sup>Ibid.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid., p. 158. The case in question relates to I.B.M.

<sup>5</sup>Ibid., p. 255. See Chapter 8 viz. Italy and deglomeration policies.

Also desirable would be some attempt to limit the amount of direct and indirect subsidies that national governments in the EC are able to offer to attract f.d.i. to their respective development areas. This is necessary if all (equivalent) regions are to compete on an equal footing.

-----  
The analysis of the preceding pages, although by no means exhaustive, has hopefully served to bring out some of the main regional implications of the European integration process. We have seen how standard theory predicted a growing geographical concentration of economic activities and a large degree of industrial structural change.

In the latter case the theory was a little off the mark and whole industries did not in fact disappear as was once suggested. However the growing concentration of economic activity in the hands of a limited number of enterprises -- which may almost certainly have been speeded up by the integration process -- can also be seen to have brought with it new problems and regional implications. The task for regional policy is to make these new elements fit in with the overall goal of regional balance.

The precise question of fitting policy instruments to particular problems is a matter that we shall discuss at length in following chapters.

### CONCLUSIONS

In the course of our previous chapters we have observed firstly, how the trend towards economic polarisation may be largely self-reinforcing and, secondly, how it may be accentuated by the process of integration and the establishment of a Customs Union.

Whilst the answer of regional policy makers in the 60s and 70s was generally to induce existing firms to move out to development areas, the situation in the 1980s is likely to be vastly different and substantially more complex.

Specifically the important changes in organisational structure that have often arisen, both within and between regions of the same country, lead us to the conclusion that regional policy and development theory must now be viewed in an entirely new framework.

Much more attention must now be paid to the development of locally based enterprises and the impediments to growth which they face.

Furthermore, the growing importance of the largest European enterprises coupled with the functional sub-division of activities at a spatial level can be seen to have far-reaching consequences for the productive and innovative capacity of the peripheral regions. Specifically the effects can be seen in terms of:

- (i) the functional division of labour at a spatial level
- (ii) the centralisation of headquarter and R & D functions
- (iii) the unequal distribution of production and technological capacity
- (iv) the unequal distribution of economic surplus
- (v) the growing contrast between small and large scale enterprises
- (vi) the implications for competition -- the recourse to takeovers in expanding markets.

Whilst 'dependent' development may be better than no development at all, the real question should be, 'what are the alternatives, and are they better?'. In this sense perhaps the main danger to be avoided is that of the less developed regions being simply reduced to standardised, lower echelons of economic activity whilst the potential of indigenous firms is overlooked. These and other related questions will be dealt with in some detail in the chapters which follow.

---

BIBLIOGRAPHY Chapters 5, 6 and 7.

- SPOONER D. (1972) "Industrial movement and the rural periphery -- the case of Devon and Cornwall", R.S., vol. 6.
- Commissariat Général du Plan (1971) "Espace rural -- rapport pour la préparation du VI<sup>e</sup> Plan 1971-75", Doc. Française.
- HANSEN N. (1974) "Public Policy and Regional Economic Development", Camb. Mass.
- Scottish Economic Bulletin 1980, no. 20, H.M.S.O.
- Firn & Swales (1978) "The formation of new manufacturing establishments in the Central Clyde-side and West Midlands 1963-19", R.S. vol. 12 no. 2.
- FOTHERGILL & GUDGIN (1979) "The job generation process in Britain", C.E.S. Paper no. 32 (Centre for Environmental Studies).
- STOREY (1979) "Job generation and small firms policy in Britain", C.E.S. paper no. 40, London.
- SVIMEZ (1978) "25 years of special action for the development of Southern Italy", by G. Podbielski, Giuffrè.
- BENETTI et al (1975) "Il Capitale Straniero nel Mezzogiorno", Roma.
- TUPPEN J. (1980) "France", Praeger.
- INSEE, Economie et Statistiques, various issues.
- MACKAY R. & THOMSON L. (1979) "Important trends in regional policy", S.J.P.E., vol. 26, no. 3, November.
- McALEESE & McDONALD (1978) "Employment growth and the development of linkages in foreign-owned and domestic manufacturing enterprises", O.B.E.S., IV no. 4.
- BADE (1979) "Functional aspects of the regional economic structure", discussion paper, Wissenschaftszentrum Berlin.

- McALEESE (1977) "I.D.A. Report "A profile of grant-aided industry in Ireland", Dublin.
- D.A.T.A.R (1974) "Investissements étrangers et Aménagement du Territoire", Paris.
- Business International (1974) I.A.S.M. Report, "Survey of Foreign Investments in the Mezzogiorno", Rome.
- MARSHALL J.(1979) "Ownership, organisation and industrial linkage: a case study of the Northern region of England", R.S. no. 6.
- TOWNROE & ROBERTS(1980) "Local-External Economies for British Manufacturing Industry", Gower.
- I.D.A. (1979) Industrial Plan 1978-82.
- McDERMOTT (1979) "Multinational manufacturing firms and regional development", S.J.P.E. Vol. 26, no. 3.
- TOWNROE P.M. (1975) "Branch plants location and regional development", Town Planning Review vol. 46, no. 1.
- HOOVER & VERNON(1962) "Anatomy of a Metropolis", New York.
- AMENDOLA & BARATTA(1978), SVIMEZ Report, "Investimenti industriali e sviluppo dualistico", Giuffrè.
- SVIMEZ (1980) "Rapporto 1980 sull'Economia del Mezzogiorno", Atti del Convegno, Naples.
- DUNFORD M. (1977) "Regional policy and the restructuring of capital", University of Sussex, Working Paper no. 4.
- HOLLAND S. (1976) "Capital versus the Regions", Macmillan.
- SHONFIELD A. (1965) Modern Capitalism, Oxford.
- O.E.C.D. (1978) "Policies for the Stimulation of industrial innovation", vol. II-2, Paris.
- I.I.M. (1980) "Helping small firms grow", discussion paper series, Wissenschaftszentrum Berlin.
- THWAITES A.T.(1978) "Technological change, mobile plants and regional development", R.S. vol. 12 no. 4.
- BANNOCK (1976) "The Smaller Business in Britain and Germany", Wilton, London.
- EWERS & WETTMAN(1980) "Innovation-oriented regional policy", R.S. no. 3.



- FRANKO L. (1980) "European Industrial Policy, Past, Present and Future", Conference Board in Europe.
- O.E.C.D. (1981) "North/South technology transfer: the adjustments ahead", Paris.
- LEIGH & NORTH (1978) "Regional aspects of acquisition activity in British manufacturing industry", R.S. vol. 12.
- E.C. (1981) "Deglomeration Policies in the E.C.", Regional Policy Series no. 18.
- PELKMAN J. (1981) "The impact of large firms in the European Economy", Conference Paper, Brussels, June 1981.
- SCHERER et al (1975) "The Economies of Multi-Plant Operation", Harvard U.P.
- HAMILTON F. (1978) "Aspects of industrial mobility in the British economy", R.S. no. 2
- JACQUEMIN & DE JONG (1977) "European Industrial Organisation", Macmillan.
- MUELLER (ed) (1980) "The determinants and effects of mergers", I.I.M. (Berlin), Dabl. Camb. Mass.
- SYLOS-LABINI (1957) "Oligopolio e progresso tecnico", Milan, Giuffrè.
- BAIN (1956) "Barriers to New Competition", Camb. Mass.
- MODIGLIANI (1958) "New developments on the oligopoly front", J.P.E., pp. 215-232.
- EATON & LIPSEY (1979) "The theory of market preemption: the presence of excess capacity and monopoly in growing spatial markets", Economica, 46.
- PASHIGIAN B. (1968) "Limit price and the market share of the leading firm", Journal of Industrial Economics, 16.
- NEEDHAM D. (1971) "Economic Analysis and Industrial Structure", New York.

- WENDERS J.(1971) "Excess capacity as a barrier to entry", Journal of Industrial Economics, 20.
- ESPOSITO & ESPOSITO(1974) "Excess capacity and market structure", Review of Economics and Statistics, 56.
- HOTELLING H.(1929) "Stability in competition", E.J., 29.
- FRANKO L. (1976) "The European Multinationals", New York.
- LOCKSLEY & WARD(1979) "Concentration in manufacturing in the EEC", C.J.E. no. 3.
- SEERS & VAITSOS(1980) "Integration and Unequal Development: the Experience of the E.E.C.", Macmillan.
- PHLIPS (1976) "Spatial Pricing and Competition", E.C. - Competition Studies.
- SEERS et al (1979) "Underdeveloped Europe -- studies in core-periphery relations", Harvester Press.
- DUNNING (1981) and PEARCE D. "The Worlds Largest Industrial Enterprises", Gower.
- VAITSOS C.(1974) "Intercountry Income Distribution and Transnational Enterprises", Oxford.
- JACQUEMIN A. (1981) "Imperfect market structure and international trade: some recent research", colloquium paper, in The Management of Euro-American trade conflicts in the 1980s, European University Institute, Florence.
- CAVES R. (1974) "International trade, international investment, and imperfect markets", Special papers in International Economics, Princeton U., no. 10.
- MEYER F.V.(1978) "International Trade Policy", Croom Helm.
- BURMANJER R. "The industrial economics of Common-Market integration", E.U.I. Workshop Paper, April 7, 1981.
- YANNOPOULOS & DUNNING (1976) "Multinational Enterprises and regional development", R.S. no. 4.
- BLACKBOURN A.(1978) "MNEs and regional development: a comment", R.S. no. 1.

- O'FARREL P.N.(1980) "MNEs and regional development: Irish evidence", R.S. no. 2.
- YUILL et al(1980) "Regional Policy in the European Community", Croom Helm, London.
- HOWARD R. (1968) "The movement of manufacturing industry in the U.K.: 1945-65", Board of Trade, H.M.S.C.
- VINER J. (1953) "The Customs Union Issue", New York.
- BELASSA B. (1966) "Tariff reductions and trade in manufactures among the industrial countries", A.E.R. June.
- GRUBEL & LLOYD(1975) "Intra-Industry Trade", London.
- LERMER G.(1973) "Evidence from trade data regarding the rationalizing of Canadian industry", Canadian Journal of Economics, May.



P A R T     F O U R

" R E G I O N A L   D E V E L O P M E N T   P O L I C Y "

C H A P T E R     E I G H T

---

A SURVEY AND ANALYSIS OF REGIONAL POLICY  
INSTRUMENTS IN FRANCE, ITALY & IRELAND -  
WITH REFERENCE TO THE U.K..

---

CONTENTS :

- 8.1     Strategies for regional harmonisation
- 8.2     European Community principles for co-ordination of regional aid schemes
- 8.3.     The major incentives and public policy - a review
- 8.3.1     France\_
  - General background
  - Infrastructure and urban development policy
  - French regional incentive policy

Results :

Proposals for reform of regional development aids
- 8.3.2     Italy
  - General background
  - The role of state industry in regional development

Contents/

- Infrastructure policy
- The main incentives
- Results :
- 8.3.3 Ireland
  - Background
  - The main incentives
  - Results :
- 8.3.4 Deglomeration policies
  - France
  - Italy
  - Comparative analysis :
- 8.4 A comparison of the value of incentives and total national expenditure on regional policy
- 8.5 Summary : some preliminary considerations on the effectiveness of the various instruments
  - Investment subsidies
  - Regional factor subsidies and market structure
  - Labour subsidies
  - Selectivity and industrial subsidies
  - Some concluding remarks on the various incentives :

Conclusions

Bibliography

## P A R T I V

---

### CHAPTER 8

---

#### REGIONAL DEVELOPMENT POLICY

##### 8.1. Strategies for regional harmonisation

Up to this point we have reviewed a number of approaches, each explaining some aspect of regional economic development. It is worthwhile now, to briefly **recall** these arguments as they have considerable bearing on the attempt to assess policies aimed at improving regional performance.

The determinants of regional growth of output (and thereby regional productivity, income and employment), can be viewed from both supply and demand sides, and it is possible to combine these two approaches.

On the supply side, the resource endowment approach<sup>1</sup> would stress the importance of sectoral structure, the level of infrastructure provision and agglomeration effects. Whilst, in principle, the resource endowment of a particular area can be considered as determining its production possibilities or potential output, "it is not so much the total resource endowment, but rather a set of "bottle-neck" factors<sup>2</sup> which determines the productive capacity and limits the development or income potential."

As such, the relative resource equipment per worker will determine the potential output, and if the existing productive capacity is fully utilised, actual output as well. Optimal use of resource capacity will however depend on its combination with specialised and substitutable private factors of production. Whether this is the case will depend on the particular benefit-cost ratio,

---

<sup>1</sup>For a review of this approach in English, see; working paper by D. Biehl, in Report of the Study Group on the role of Public Finance in European Integration, European Commission, 1977, vol. II, esp. pp. 69-79.

<sup>2</sup>The costs of eliminating these factors and the benefits arising therefrom may vary considerably; "... in general it is more expensive -- in terms of resource costs -- to compensate a region for the non-existence of these bottle-neck factors, or to replace fully utilised bottle-neck factors, and furthermore the possibilities for substitution become more limited as their location is more fixed, as their production capacity is higher, and as they are in more specialised industries", ibid., p. 69.

namely the relation between productivity and the real wage rate or the "efficiency-wage".

The "relative competitiveness" approach outlined above can furthermore be combined with the demand oriented export-led growth approach<sup>1</sup>. On this line of reasoning, the potential product of a region will depend also on its proximity to high income areas: the lower (under given real-wage differences) are the costs for a peripheral region to participate in interregional trade with central high income regions, the more competitive it will be in the markets of the central regions<sup>2</sup>.

From our formal (demand oriented) growth model developed earlier we may add the following observations; firstly, whilst the "efficiency-wage" may be important together with distance and communications costs in determining the equilibrium level of regional output, it is fundamentally structural factors (notably the income elasticity of demand for exports) which are responsible for changes in the rate of growth of output. The resource endowment approach is however complementary here, since it stresses the importance of other structural factors (notably infrastructure and agglomeration effects) which may seriously limit development potential.

Secondly, the dynamic effects of growth should not be overlooked; competitive advantages tend to perpetuate themselves -- the positive externalities of agglomerated centres, access to wide markets and a high level of infrastructure provision in central areas, all imply that such areas will be greatly favoured under the resource endowment approach. Moreover, in a dynamic setting, where the growth rate of productivity is a positive function of the growth of output, differences in regional productivity and output growth rates are likely to persist leading to regional di-

---

<sup>1</sup> See also D. Biehl, ibid., p. 79.

<sup>2</sup> In this sense a region's economic or market potential can be viewed as being determined by the relative proximity of that region to the markets of other regions. It is notable that a recent study of economic potential of the E.C. regions shows that the gap in relative accessibility between the most central and peripheral regions widened from the sixties to the mid-70s. See European Commission, "The Regions of Europe", 1981, pp. 60-61.



vergence in "efficiency wages" and per capita incomes. Hence to view the regional problem in terms of regional wage rates being out of line with productivity is something of an oversimplification since either relative wages (or wage subsidies) may have to decrease (increase) permanently to restore competitive equilibrium. It can then be seen that efforts to improve the structure of regional exports and production, as well as the elimination of supply-side bottlenecks, are necessary for any long-term improvement in regional competitiveness and growth.

At this point it is useful to differentiate between public policies relating to general infrastructure and those relating to productive\* investments<sup>1</sup>;

i) infrastructure: in general it is often very difficult to arrive at any objective estimate of regional differences in the level of infrastructure provision<sup>2</sup> -- especially since, in any case, such an assessment would need to take into account the particular needs of specific regions. In practice, a large part of public expenditure in this area has tended to be undertaken on primarily social considerations -- namely the attainment of reasonable regional equality in the provision of public services and utilities. As such the overall redistributive effect of public expenditure on infrastructure tends to be neutral<sup>3</sup>, except in the

---

\*That is those activities directly related to the production process.

<sup>1</sup>With regard to bottle-neck factors not specifically related to infrastructure, see ch. 5.

<sup>2</sup>Significantly, the Commission study, "the Regions of Europe" 1st periodic report, 1981, also mentioned this unfortunate statistical gap (section 1.8). The report does however note that in respect to education and training infrastructures, "training opportunities appear to be inadequate in the peripheral and rural regions in respect of scientific and technical education at both second level and post-school stages", ibid., p. 115.

<sup>3</sup>See MacDougall Report vol. II, esp. ch. vis France.

case where special instruments are adopted<sup>1</sup> or where there is a decided political will (expressed in institutional form) to the contrary (e.g. Italy, Cassa per il Mezzogiorno).

Very often such programmes are concentrated on specific problems or objectives, for example, the improvement of communications (S.W. France, Ireland, S.Italy), improving water supply (S.Italy), the redevelopment of former industrial sites (U.K.), the provision of (advance) industrial estates (U.K., Ireland)<sup>2</sup>.

Infrastructure investment can therefore be viewed as in the first place, providing a common base of amenities and services (e.g. accessibility, education) at a spatial level, and in the second place, as improving certain shortcomings (e.g. water supply, pollution) or bottlenecks to further development (e.g. industrial or tourist infrastructure). There is often a fine and sometimes indistinct borderline between infrastructure investments for "social" and "productive" consumption (e.g. water and energy supply) -- and some would argue that in most cases there is a great deal of overlap.

Given that a large if not the major part of government infrastructure expenditure falls under the former category it is also important to ensure its full and efficient utilisation. As one author has remarked, "The chief benefit of a well conceived regional policy is to secure in the long-run a more efficient employment of all forms of national capital taken together -- including of course social capital -- than would result from an entrepreneur's conventional profit-and-loss approach to the problem of investment."<sup>3</sup> The argument here is that apart from the first round income effect of a productive investment, there is also a "capacity" effect -- that is, the effect of the additional investment on the degree to which existing productive capacity is used. Hence, whilst the return to an investment project may appear low in the first instance, it may "yet turn out to be an efficient use

<sup>1</sup> E.g., the 'Gemeinschaftsaufgabe', for the improvement of regional structure in W. Germany (*ibid.*, p. 100).

<sup>2</sup> See E.C., "The Regional Development Programme" 1979, ch. 4.

<sup>3</sup> Shonfield (1965), p. 183.

of capital once the calculation takes in the additional return accruing from the venture to other investments indirectly affected, both private and public."<sup>1</sup>

ii) productive investments: the above comments were intended to make clear the nature of the relationship between public policy and private enterprise as concerns regional development. Italy is perhaps one of the E.C. countries where this relationship has been made most explicit. With a relatively high share of productive investment in the state-holding sector, the Italian authorities were quick to seize the opportunity of combining public, infrastructure and productive investment projects, especially in the context of designated industrial areas or 'growth-points'<sup>2</sup>. This was facilitated by, amongst other things, the obligation imposed on state-holding enterprises to locate a certain proportion of their investment in the south.

Whatever the shortcomings of this approach (see ch. 5.3.), it is doubtful whether, in particular, given the high degree of coordination required at various levels, development could have been achieved at such pace if left only to market forces<sup>3</sup>.

Italy is however a major exception in the European context in its use of state enterprise to pursue the objectives of regional development. More generally, and in all countries of the E.C. investment incentives and less commonly, disincentive policies form the cornerstone of regional policy.

Investment incentives -- which grew substantially in coverage and real value in most countries from the 1960s on -- are aimed at attracting firms (industry or services) to locate productive investment in problem regions. In some countries<sup>4</sup> such incentives are combined with disincentive (or deglomeration) policies in congested areas, with the aim of increasing the supply of poten-

<sup>1</sup> Shonfield, 1965, p. 278. <sup>2</sup> For a good review of public infrastructure policy in S. Italy see Podbielski, 1978, esp. chs. 3 and 5.

<sup>3</sup> Similar arguments are put forward by Shonfield (1965), pp. 184-5 in his assessment of the achievements of the state-owned (oil and natural gas) corporation, ENI, in the 50s and early 60s.

<sup>4</sup> France, U.K., Italy and the Netherlands. Such policies have in general had decreasing success since around the mid-1970s and have increasingly come up against severe criticism, particularly with respect to their sometimes negative effects on the development of inner urban centres. They are discussed separately in section 8.3.5

tially divertible (or mobile) investment to the development areas.

As one author has noted,

"By the start of the 1970s, the regional-incentive armoury was well stocked in almost every Community country, the incentives on offer ranging from capital grants to interest-subsidised loans, from accelerated depreciation allowances to direct tax concessions, from employment premia to rent subsidies, from concessions on electricity prices to labour training aids, and from removal-cost assistance to transport subsidies."<sup>1</sup>

Conceptually, these subsidies can be viewed as compensating producers for a variety of costs encountered in moving to or setting up in a development area. Their effectiveness will therefore depend on whether they are of sufficient size to compensate for such costs. At least two types of cost can be distinguished<sup>2</sup>; i) transport and communications costs associated with poor accessibility to major supplies or major markets; ii) additional training costs due to lower quality labour force often found in underdeveloped regions, which because of collective bargaining at a national level, may not be reflected in regional wage differentials.

As such, one can then distinguish between the break-even subsidy (which just compensates for regional cost differentials) and the required subsidy which furthermore compensates for an appropriate degree of risk involved in setting-up in an unknown location, and a degree of uncertainty with respect to receipt or continuation of the subsidy.

Furthermore, the required subsidy level should be compared with the effective rather than the nominal subsidy value; that is, the net present value of the subsidy taking into account eligible items, tax treatment and delays in payment (see on, section 8.4.).

In the following sections we shall confine ourselves to discussing only the major regional instruments in the three countries considered (France, Italy, Ireland). Thus we include for example aspects of state-intervention only where these are particularly relevant. Any further detailed discussion would be somewhat superfluous given the large amount of recent literature on this sub-

---

<sup>1</sup>Yuill, Allen and Hull (1980), p. 14.

<sup>2</sup>See Yannopoulos & Dunning (1976).

ject<sup>1</sup>.

Finally we given an international comparison of the effective value and expenditure on the main incentives, and consider the various advantages/disadvantages of each measure in the way it operates.

## 8.2. European Community principles of coordination of regional aid schemes

In December 1978 the Commission communicated to Member States<sup>2</sup> the principles it would apply henceforth to regional aid systems already in force or to be established in the regions<sup>3</sup> of the Community. These principles were to run for a period of three years and are now due to be revised (although it is unlikely that any of the main points mentioned below will be changed significantly).

In the first place, one of the Commission's main concerns was that aids granted to certain regions should not distort competition or hamper the proper functioning of the single market.

In this respect national measures have been coordinated by setting ceiling limits (measured in 'net grant equivalent') on regional aid intensity. Compared to previous arrangements, the provisions are broadened by the inclusion of the alternative ceiling related to job creation, and new measurement techniques for certain types of aid previously regarded as non-transparent.

The categories established are as follows:

- Greenland no upper limits
- Mezzogiorno , Ireland 75% of initial investment  
N.Ireland, Berlin(West) costs or 13,000 EUA per job created thereby\*
- France: West and S. West, 30% of initial investment costs or 5,500  
Massif Central, Corsica EUA per job
- Italy: designated areas  
in the Centre/North

<sup>1</sup> See for example, Yuill, Allen, Hull (1980); Vanhove & Klassen (1980); Allen, K. (1979); Commission of the European Communities, "Regional Policy Series", esp. no. 15.

<sup>2</sup> O.J. L31 of 3.2.1979 for full text. <sup>3</sup> In practice the designated development areas under national legislation. \* For investments exceeding 3m. EUA not more than a further 25% of initial investment costs or 4,500 EUA per job can be paid by way of other aids and must be spaced over 5 years. Source: E.C. 8th (ctd.)

U.K.: assisted areas  
with the exception  
of "Intermediate Areas"

- West of Denmark and the Zonenrandgebiet border region in W. Germany      25% of initial investment costs or 4,500 EUA per job
- other Community regions (i.e. more central and industrial regions)      20% of initial investment costs or 3,500 EUA per job

A second principle of coordination is that aids should ultimately contribute to competitiveness such that firms may continue to function profitably in the longer term without aid.

In this respect, the Commission has consistently expressed its general opposition to the granting of aid which is not conditional on initial investment or the creation of jobs, but is linked to a firm's production and constitutes operating aid<sup>1</sup>.

A final important point concerns Community guidelines towards sectoral aids in certain crisis industries (shipbuilding, textiles, manmade fibres, steel). Whilst the Commission has accepted the justification for aids to enable orderly adjustment to market conditions, it has also recognized the need to avoid an undesirable increase of national interventions in these sectors.

Specifically, "since it is a common feature of the industries concerned that capacity is excessive, aids should not be given to investment projects which would result in capacity being increased"<sup>2</sup>. In a number of cases, this criterion has been applied not only to sectoral, but also to regional aids.

In conclusion, "the combined effect of the (alternative) ceiling related to job creation, the common ceiling for the less-developed regions, the new techniques of measurement and the freeze on operating aids ensures that all regional aids are now subject to control"<sup>3</sup>.

---

\* (ctd.) Competition Report. Note: aids paid for the transfer of an establishment are assessed on the value of capital equipment (or workers) transferred, or by limitation of aid to the actual costs involved.

<sup>1</sup>E.C. 10th Competition Report, point 164. An example here is the UK Regional Development Grant which is granted automatically for any investment (including the renewal of capital goods). The UK Govt. has undertaken to amend it. Another example is Irish supplementary depreciation allowance of 20% for (also replacement) plant and machinery - it was withdrawn, subject to Commission objection, in 1981.

<sup>2</sup>E.C. 8th Comp. Rep., 1978.      <sup>3</sup>Ibid., point 154.

### 8.3. THE MAJOR INCENTIVES AND PUBLIC POLICY - A REVIEW

#### 8.3.1. FRANCE

##### (i) General background

The problems of regional development only became an important national issue after 1967 -- a year which corresponded to the publication of J.F. Gravier's "Paris et le désert français". This book, which greatly aroused public interest, drew attention to the disparities which existed between Paris and the regions of the South and West, and outlined the problems and effects of excessive centralisation in the Paris region. In the immediate post-war period, Paris gained a disproportionate share of new industrial development. On average around one in three new jobs in industry were located in the Paris region between 1949 and 1954. Furthermore there was a substantial net inflow of firms to this region over the same period<sup>1</sup>.

In 1950 the first steps towards a "plan national d'aménagement du territoire" were outlined in a document produced by the Minister of Reconstruction and Housing. One of the main elements of the plan was to decentralise industrial employment from the Paris region, concentrating particularly on newer, fast-growth industries such as automobiles and electronics.

In order to help implement these plans, the "Fonds National d'Aménagement du Territoire" (FNAT) was set up in 1950. Basically the fund was used to finance the creation of a number of industrial estates and provide corresponding infrastructure works.

---

<sup>1</sup>Allen & MacLennan (1970), p.152, table 6.1.

On the other hand, there were no effective legal powers, at that time, to enforce expansion outside the Paris region. Only in 1955 were official restrictions placed on industrial expansion in Paris.

It was not until 1953 that the National Planning Commission began to play a role in regional development policy. In a sense, however, these first efforts were somewhat limited and the Second Plan (1954-57) was dominated by the problem of dealing with the short-term consequences of the 1952-59 recession. Supplementary financial benefits were given to firms expanding in certain problem areas (zones critiques) which were heavily dependent on industries that faced secular or cyclical decline in demand (mainly wool, textiles and leather).

The Third Plan (1957-61) was in fact the first to specify regional development as one of its general objectives. The plan called for a more balanced distribution of population, industry and incomes, and outlined a number of arguments for limiting the growth of Paris.

1955 saw the announcement by the government of a package of financial aids to firms establishing outside Paris. This represented the first serious state commitment to aiding regional development and laid the basis for regional incentive policy for the years to come. A special interdepartmental committee was set up to deal with the funds made available (Fonds de Développement Economique et Social -- F.D.E.S.). Furthermore, the F.D.E.S. acquired considerable control over publically financed investment -- at the national level it replaced the Modernization and Equipment Fund which had financed the investment projects in the First Plan (1946-52), and the interministerial Investment Committee which had supervised the spending of available public investment funds since 1948.



The 1955 legislation introduced a special investment grant (amounting to a maximum of 20% of capital costs) available to firms establishing or expanding in certain "critical areas". By 1956 26 such areas had been delineated. They were widely scattered over the whole country although most of them were in the South and West. As regards size the areas were somewhat limited -- in most cases grouping several communes, and in some cases, even single towns. Apart from investment grants, other financial aids were made available -- these included subsidised loans, tax concessions (transfer tax on buildings, and local taxes), manpower training and mobility grants. These aids were only available to firms decentralizing outside the Paris region, whether or not they located in one of the existent areas. The logic of these aids was to somehow compensate firms for the risk and cost involved in the decentralisation process.

Finally, to deal with the credit problems faced, in particular, by small and medium-sized firms<sup>1</sup>, the Sociétés de Développement Régionale (S.D.R.) were set up in 1955. These companies had the function of acquiring shares in firms located in depressed or under-developed regions. In addition the S.D.R. could also provide medium term loans or underwrite long term borrowing by firms.

Briefly, the Fourth and Fifth plans continued to define and expand the basis of regional development policy which had been laid in the 1950s. The major elements of the Fourth Plan (1962-65) included a more explicit definition about the strategy of regional development planning. In particular, it chose a selective approach. The policy implication was that, to be fully effective, expenditure on general infrastructure should

---

<sup>1</sup> See Allen & MacLennan, p. 164 for further discussion of this point.

be concentrated on a limited number of well chosen locations or growth-poles. This would encourage large firms to decentralise to such centres, and a secondary or "spill-over" effect would be felt in the surrounding areas by inducing the development of secondary poles through inter-industry and service linkages.

Secondly, and complementary to the abovementioned aims, the plan for the first time included a regionalisation of the public investment programmes in the national plan.

In the Fifth Plan, the policy of selectivity was defined more precisely with the designation of eight growth-poles (*métropoles d'équilibre*) to act as counter-weights to the growth and importance of the Paris region. As has already been observed<sup>1</sup>, the acceptance of the principle of industrial concentration implied large scale and long term migration for sparsely populated regions such as those in the South-West and West of France.

On the other hand the Plan contained a rather significant concession towards the West of France in the form of a target to create 145,000 jobs in industry (i.e. around 35% of the projected increase) between 1966-70. The aim was to avoid an increase in regional disparities and provide a more equitable distribution of the benefits from growth. However, it was also in some sense a stop-gap measure in recognition of the fact that industrial employment had remained stable or shown only below average growth in the West and South-West over the period 1959-62.

To conclude this section it is worthwhile to say a few words about the distribution of regional policy expenditure and public expenditure in the period up to 1966.

---

<sup>1</sup>Op. cit., p. 104.

Firstly, considering grants and loans awarded over the period 1955-66, the most noticeable feature is the rather wide-ranging regional coverage of financial assistance. Many regions of the Paris basin gained considerably, especially Centre and Picardie. So too did the Nord region, Lorraine in the East and Rhône-Alps in the South-east. As one author has commented, "up to 1966, the effect of financial aid has been to underpin industrial expansion in regions whose economies were reasonably healthy and latterly to encourage some substantial ... industrialisation in the three western regions (mainly Brittany and Loire)"<sup>1</sup>. By 1966 the degree of selectivity in regional grants and loans had reached such proportions that 50% of aid was channelled "to around one fifth of the number of assisted firms located in what is effectively the Brittany peninsula and four city regions outside it".<sup>2</sup>

Certainly, it was not until the mid-60s, that both the geographical coverage and value of incentives was raised sufficiently to attract decentralising firms to the more remote areas of the South-west and Massif Central. Before this occurred, it is notable that between 1950-62, "60% of the jobs created by decentralising firms were in the regions of the Paris basin and the contiguous regions of Burgundy and Lower Normandy".<sup>3</sup>

Considering that net migration from the South West amounted to 65,000, the number of jobs created by decentralis-

---

<sup>1</sup>K. Allen & M.C. MacLennan, p. 246.

<sup>2</sup>Ibid.

<sup>3</sup>Ibid., p. 243.

ation over the period, 10,500, was of relatively minor importance. The Massif Central was in a similar position. In other words it would seem that interregional migration was still being heavily relied upon to achieve overall regional balance.

Although regionalisation of the budget was still incomplete by 1965, the figures available<sup>1</sup> suggest that the redistributive power of public capital expenditure was certainly not significant. On the basis of expenditure per head both the South-West and the Massif Central were below average for almost every major component of public expenditure. Neither did the loans to local authorities from the various funds and institutions present a much better figure<sup>2</sup>. A more rigorous analysis of public expenditure in France in 1970-73 comes to similar conclusions<sup>3</sup>. In particular "given that regionalisation of the capital expenditure budget does not take into account 'major projects' which in many cases are carried out in the Paris region ... it is highly likely that the ... regional allocation of central government infrastructure expenditure and grants has zero redistributive impact."

The above discussion raises the question of whether public capital expenditure can be considered to play a major role in promoting employment growth in the more backward regions, particularly the South West and the Massif Central.

---

<sup>1</sup>Projet de loi de finances 1967 vol. III, appendix. See also Prud'homme(1974), p. 48.

<sup>2</sup>To be fair the F.I.A.T. (Fonds d'intervention pour l'aménagement du territoire) infrastructure grants were more favourably distributed. However with a total annual budget of around Ff. 175m. the overall picture could not have been changed considerably.

<sup>3</sup>MacDougall Report 1977, Vol. II, pp. 49, 50.

(ii) infrastructure and urban development policy

At the outset it is worth noting that there is a very strong link in France between national economic planning, urban policy and infrastructure policy. We shall, however, limit our discussion to the major points.

a) urban development. French urban planning was at an early stage (see back) concerned with the need to provide urban centres capable of counteracting the influence and attraction of Paris and acting as focal points for the relocation of manufacturing and tertiary activities. Eight cities, or groups of cities, were designated in 1964 as "growth poles", termed 'Métropoles d'équilibre', on a range of criteria including size and central-place<sup>1</sup> status. Such towns were to benefit from special efforts and appropriations for infrastructure under the 5th Plan.

One point of criticism was that large areas were not covered by this policy -- notably Clermont-Ferrand (Massif Central), Dijon (Burgundy), and Rennes (Brittany) were excluded.

In a sense a partial retreat from the aims of this policy was made in 1965 (and embodied in the 6th Plan), when it was realised that urgent steps should be taken to accommodate the foreseen growth of the Paris agglomeration. The plan was to create five new towns at a distance of around 20km from Paris. Whilst firms relocating from the Paris central area to the new towns would not receive regional incentives, the development of such towns was in fact a major commitment of the 6th Plan, and furthermore closely linked to deglomeration policy approval system (Agrément) which operated in the City of Paris. Recently however, the new towns have experienced increasing difficulty in achieving employment targets, with the result that "new towns in the Paris region and agglomerations in the provinces are now to some extent in competition for jobs moving out of the centre of the Paris agglomeration"<sup>2</sup>.

<sup>1</sup>On the basis of nine functional regions and eight other centres.

<sup>2</sup>Allen (1979), p. 189.

In 1967 another goal appeared -- presumably in a further attempt to balance the growth of Paris -- to promote certain medium-sized cities within a 100-200km radius of the capital. This policy became more generalised in 1970 with a policy for medium-sized towns (villes moyennes)<sup>1</sup>, which was aimed at increasing the ability of the métropoles to transmit growth to their surrounding areas. It is worth noting that preoccupation concerning the ability of such growth poles to achieve balanced spatial development, began to increase over the 70s, particularly in view of the very divergent spatial demographic trends<sup>2</sup>.

More recently, French spatial planning has seen a further movement towards dispersion in the form of a various aids for rural renewal (rénovation rurale)<sup>3</sup> and a policy towards smaller

<sup>1</sup>Such towns qualified for the maximum rate of regional investment grant (P.D.R.) and preferential treatment regarding central government expenditure on infrastructure.

<sup>2</sup>For example, whilst population growth in the six major cities after Paris (all métropoles) varied from 5%-14% between 1968-75, over the same period the population of rural communes remained virtually static. Non-urbanized and non-industrial rural communes (Z.P.I.U.) continued to show an average annual rate of population decline, constant since 1954, of around (-) .8%.

Source: Données Sociales, 1978, INSEE, p. 11.

<sup>3</sup>This comes under several of the 25 "Priority action programmes" (P.A.P.) in the 7th Plan. The state's contribution to regional p.a.p.s has however varied considerably between regions. Between 1976-80 commitments (in million, 1975 FFr.) amounted to 17.2 in Corsica, 13.1 in Limousin, 60.7 in Auvergne, 41.3 in Midi-Pyrénées (that is some of the least developed rural areas) and varied between 72.8 to 615.0 in the non-development areas (Paris 723.6). Rural development would therefore seem to be outranked by other (urban) priorities. For figures see E.C. Regional Development Programmes — France 1976-1980, 1978.

(rural) urban centres (contrats de pays)<sup>1</sup>, and their surroundings.

As concerns Paris, the attempt to restrict the growth of the capital through decentralisation has been gradually watered down and qualified in a number of respects. In the early 70s the D.A.T.A.R.<sup>2</sup> pointed to the need to maintain the importance and position of Paris as an international centre. This view found its expression in a softening of decentralisation measures towards projects with international or high-skill functions in industry or services. As a result only "activités banales" or relatively low-skilled projects were effectively pressurised to move outside Paris or the new towns, to the provinces<sup>3</sup>.

As regards urban growth French policy has therefore several, even conflicting goals; i) promoting Paris as an international centre, ii) promoting the new towns in Paris and elsewhere; iii) promoting eight equilibrium metropolises; iv) promoting certain medium-sized towns; v) promoting rural urban centres "A policy of promoting everyone is of course no policy at all."<sup>4</sup>

From what can be gathered from new developments in French regional policy (see on), it seems clear that i) towns with over 100,000 inhabitants will in general receive less favourable

<sup>1</sup>The "politique des petites villes et de leurs pays", was developed in 1974/5 in addition to the "plans d'aménagement ruraux" (P.A.R.) introduced in 1967 which had seen only limited application. For a critical discussion see Audouin (1977), p. 211 et seq.

<sup>2</sup>Délégation à l'Aménagement du Territoire et à l'Action Régionale. The DATAR, which is directly under the authority of the Prime Minister, is the central body responsible for the execution of French regional policy. It has three broad areas of influence, i) to coordinate and influence investment decisions by ministries and local authorities, in accordance with the aims of regional planning, ii) to undertake studies of regional infrastructure requirements. It has a strong influence on planning in major urban areas and rural renewal areas, iii) it controls a special regional fund (F.I.A.T.) which, although it accounts for only around 1% of public investment expenditure, is often useful for 'strategic' projects and provides a certain leverage in interministerial negotiations.

<sup>3</sup>See Allen (1979), pp. 188-191.

<sup>4</sup>Prud'homme (1974), p. 43.

treatment than in the past, ii) greater efforts are to be made to encourage administrative, service and research establishments to decentralise (the tax on expanding industrial establishments in the Paris area is however to be suppressed)<sup>1</sup>, iii) stress is likely to be placed more heavily on rural development.

Hopefully, the various goals of French spatial planning will therefore become more consistent with one another, and, by being more specific, achieve a greater degree of effectiveness and impact on local priority situations.

(iii) French regional incentive policy.

Following recent proposals by the D.A.T.A.R. on the reform of regional incentives, and in view of the fact that legislation covering the present aids expires on 31 December 1981, it is obviously difficult to provide an overall and current view of the French incentive package.

We shall therefore subdivide the present section into two parts: (a) regional incentives from 1976-81, and (b) an outline of the proposed measures for reform.

a) 1976-1981. The regional development aid system can be divided into two categories and six measures.






The first category is composed of aids relating to the creation of employment in industry or services in certain structurally disadvantaged regions. These aids are complemented by certain fiscal advantages. The second category concerns the industrial adaptation fund (Fonds Spécial d'Adaptation Industrielle, F.S.A.I.), created in 1978 with the aim of helping industrial conversion in certain areas affected by particularly severe sectoral crises (e.g. steel, shipbuilding).

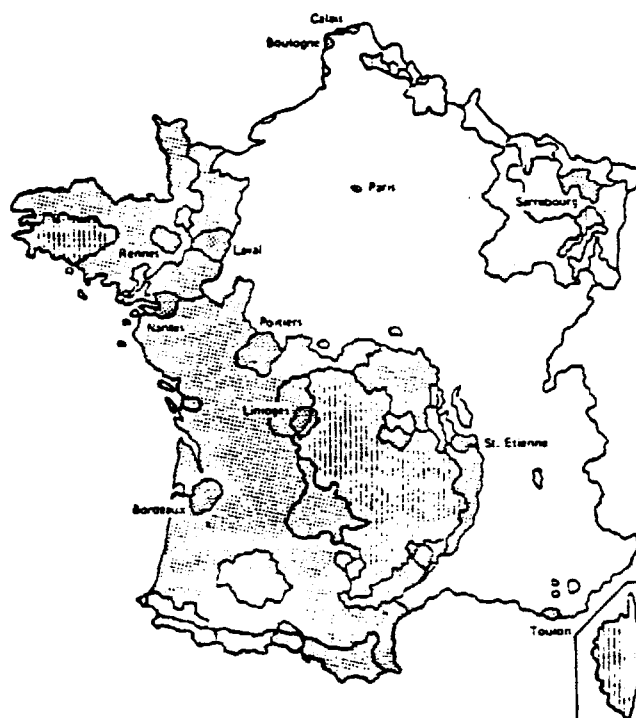
---

<sup>1</sup>See Le Monde, 1 December 1981.



-The regional development grant (prime de développement régional, P.D.R.). The P.D.R. constitutes the major regional incentive in France and accounts for around 45% of annual regional incentive spending. It is a project related capital grant which varies in intensity depending on the area concerned and whether the project is an extension or a new start (see map)<sup>1</sup>. The minimum required fixed capital investment normally varies from Ffr. 300,000 (and 10 new jobs) for new projects in localities of under 50,000 persons to Ffr. 800,000 (and 30 new jobs) in localities above this size. Extension projects are in general treated more strictly in terms of minimum job requirements. In areas where only large projects are eligible the minimum investment required is Ffr. 10m (100 new jobs), and extension projects are ineligible.

		Setting-up	Extension
	Zone 1	25000F max. of 25%	22000F max. of 25%
	Zone 2	20000F max. of 17%	17000F max. of 17%
	Zone 3	15000F max. of 12%	12000F max. of 12%
	Only Large Projects Eligible Here		
	Upland and Rural Areas		



France: Regional Development Grant.

<sup>1</sup>Allen, p. 59.

Again, localities in upland and rural areas and Corsica have somewhat more favourable minimum investment and job requirements (although the minimum requirement does not fall below Ffr. 300,000 or 6 new jobs).

Investment and job targets must be realised within three years, and, if not achieved, any part of the award already made may be required to be repaid ("claw-back") to the granting authorities<sup>1</sup>.

Conditions of eligibility stipulate that projects must not be tied by the nature of their activity to any specific location. Furthermore; state-owned industry directly administered by the state is not eligible. Although service-sector projects are eligible under the P.D.R., such projects are generally covered by the schemes mentioned below.

- Service activities grant (prime de localisation d'activités tertiaires, P.L.A.T.).

This aid covers service sector projects which involve job creation, extension or transfer from the Paris region. Thirty new jobs must be created, or twenty in the case where the registered offices of the company transfer or set-up in a development area. In the case of an extension new jobs must represent at least a 50% increase in "tertiary" personnel, or 100 new jobs (whichever is the lower) where a new service function is created or relocated from the Paris region.

The grant is available throughout the country with the exception of the Paris Basin<sup>2</sup>. Award levels are Ffr. 20,000 per job in areas where the P.D.R. is available and Ffr. 10,000 elsewhere. There are no investment conditions.

---

<sup>1</sup> The fact that claw-back in any one year has amounted to as much as 10% of the total value of grants awarded in the same year, must certainly have caused a number of firms to hesitate before applying for the aid in question.

<sup>2</sup> For example, Orléans, Blois, Chartres, Rouen are excluded.

- research activities grant (prime de localisation d'activités de recherche, P.L.A.R.)

Similar to above; however, there is no general spatial differentiation in award levels. Ten new jobs must be created, which should in general represent at least a 30% increase in the case of extension projects. Although there are no specific investment conditions attached, the award (Ffr. 25,000 per job created) may not exceed a maximum of 15% of investment for investments of less than Ffr 10m, and a maximum of 25% of investment for larger projects, or projects situated in certain designated towns ("pôles de recherche").

- decentralisation grant (indemnité de décentralisation)

This aid is awarded to industrial firms in partial reimbursement of costs incurred in transferring all or part of their production from the Paris region. 500m<sup>2</sup> of industrial floorspace must be vacated and the award covers 90% of costs of dismantlement and 60% of transport costs. Normally awards should not exceed Ffr. 500,000.

- special aid to rural areas (aide spéciale rurale)

This is a general small-project scheme available in most "cantons" in designated rural areas. The aid applies to both industrial and service projects as well as 'artisanal' trades, tourism and hotels. For new projects the award varies from Ffr. 20,000 per job for the first ten jobs, Ffr. 15,000 per job for the next ten, and Ffr. 8,000 for a final ten. No aid is given above the thirtieth job. For extension projects, initial enterprise size is taken into account and the rate of award is calculated at the marginal rate as above. There are no investment conditions.

In addition to the aide spéciale rurale, there are several other incentive schemes for small-scale artisan firms. These include: decentralisation allowances for small sub-contractors

who move out of the Paris region; aid for the creation of artisan firms in rural areas (max. 30% of investment in the Massif Central and 16% elsewhere); special assistance for extension projects in the Massif Central (min. Ffr. 150,000 and 3 new jobs) with rates of award equal to those under the P.D.R. In a sense the above small-project schemes are intended to fill some of the gaps created by the relatively tough minimum requirements set under the P.D.R. It is difficult to understand why this approach was taken rather than the alternative of incorporating them into the original P.D.R. scheme.

- fiscal incentives. The local-business-tax concession ('*exonération de la taxe professionnelle*') is the second major regional incentive (after the P.D.R.) accounting for, very roughly, 25% of incentive spending (in terms of revenue forgone). The local business tax is an annual tax assessed according to the theoretical rental value of fiscal assets as well as some proportion of the annual wage bill, the tax rate being set independently by each département and each commune within a département.

The concession, which is made at the discretion of either the département or commune, may be up to 100% of tax liability for a period of up to five years.

The aid is reserved for new projects, extensions and, under certain circumstances, reorganisation projects. Although service sector projects are largely eligible, the vast majority of concessions have been limited to manufacturing industry.

Eligibility conditions are fairly complex. In general, however, regarding spatial coverage, tertiary activities are eligible over most of the country apart from the Paris Basin, job requirements being similar to those under the aforementioned service industry schemes.

Industrial projects are eligible over a somewhat less, but still fairly wide area. Job requirements vary from a minimum of 10 new jobs in localities of under 15,000 persons to 30 new

jobs above this size. In mountain and rural areas and Corsica the minimum job requirements are 6 and 15 jobs respectively, depending on size of locality. Extension projects must, in general, provide at least a 20% increase over initial employment.

In practice there are a number of problems with this aid. In the first place, "the variation in local-business-tax rates is such that a location offering no concession may, in the long run, be more attractive than one in which a concession is available."<sup>1</sup> Secondly, in so far as the aid leads to higher taxable profits the firm concerned will also bear a higher corporation tax burden, which may substantially reduce the effective value of the concession.

As a result the aid is often very difficult to value from the point of view of the firm, which must consequently limit its effectiveness.

- special depreciation allowance (amortissement exceptionnel)

This is a project related incentive enabling firms to write down, in addition to ordinary depreciation, 25% of the value of their new buildings in the first year. Eligibility conditions are similar to above; one notable difference however is that tourist and hotel projects do not qualify for this aid. The area covered by the scheme is limited to development areas in the West and South West only.

### Results

From 1976 to 1980 (inclusive) the main results of the major abovementioned aids can be listed as follows<sup>2</sup>:

<sup>1</sup> Yuill, Allen and Hull (1980), p. 77.

<sup>2</sup> Source: D.A.T.A.R.

i) the P.D.R. aided the creation of 198,400 jobs and was associated with investments totalling some Ffr. 27,500m;

ii) the P.L.A.T. and P.L.A.R. were granted for 216 tertiary and research projects, associated with the creation of 12,600 jobs;

iii) special aid to rural areas, was attributed to 3,852 projects, creating some 14,300 jobs;

iv) the F.S.A.I. intervened in 150 projects entailing a total investment of Ffr. 8.2 billion, and providing 22,600 new jobs. Aid was granted in the order of Ffr. 2,300m. (of which Ffr. 1,200m. in subsidies).

In total from 1976-80, 248,000 new jobs were subsidized, entailing investments of over Ffr. 36 billion, and at an incentive cost of around Ffr. 4.5 billion over these five years.

b) proposals for reform of regional development aids. As recognized by the D.A.T.A.R., a number of problems have arisen, or have become evident, in the French aid system. Aid ceilings in terms of grant levels per job created have not been revised since 1976 which has greatly affected their value; furthermore, the system has become overly complex which impedes its effectiveness; lastly, the system is too administratively centralised which has not allowed sufficient account to be taken of local situations and requirements.

The D.A.T.A.R. has therefore proposed the following lines for reform, based around a large degree of decentralisation of decision-making powers with respect to the granting of subsidies, and the designation of eligible areas.

The proposals entail replacing the present scheme by two measures, differentiated according to project type.

1) Prime d'aménagement du territoire, P.A.T. (to replace the P.D.R., P.L.A.T. and P.L.A.R.)

This is intended to be a project related aid similar to the P.D.R. The maximum rate will be Ffr. 50,000 per job created up to a limit of 25% of initial investment costs. Regions

qualifying partially or totally for this aid will be able to establish variable aid levels within the eligible zones. Hence spatial priorities may be established locally and a greater degree of selectivity should thereby be achieved.

Furthermore, the aid may, at the request of the beneficiary, be converted into a rebate on interest charges. This possibility, previously unavailable under earlier schemes, has been included in view of the requests of numerous regional authorities and enterprises. Great use is likely to be made of this alternative in view of the fact that henceforth, regional public authorities are to be allowed to participate directly in the activities of the "S.D.R." and the "sociétés de financement interrégionales" as well as the "Sociétés d'économie mixte" -- that is, in general, the major regional bodies which provide local project finance. Previously, the regional authorities could only guarantee loans from these bodies;

## 2) prime régionale à l'emploi.

This aid will be available in designated areas with the exception of towns of over 100,000 inhabitants. The maximum rate will be Ffr. 20,000 per job created up until the 30th job in the same establishment. This ceiling is raised to Ffr. 40,000 in designated mountain and rural areas. Again, regional administrations will be able to vary the intensity of the aid as between locations according to local priorities. This aid is not cumulable with the P.A.T.

Although the exact spatial conditions of eligibility for these aids still has to be determined in consultation with the regions, the population covered will certainly not exceed 38% of the national total (i.e. the actual level), and in all probability will be substantially less. In general, the larger agglomerations will be excluded from these aids, the reason being that, generally, in such locations the employment situation reflects essentially national phenomena rather than specific regional difficulties.

Whilst most procedures will effectively be decentralised, four types of specific intervention (P.A.T.) will be made at the national level, namely:

- (i) aids to employment creation in areas affected by industrial restructuring, where employment losses have been severe (e.g. Lorraine)

- ii) aids for certain projects in areas suffering from temporary employment setbacks, and which are situated outside the designated areas
  - iii) service sector projects eligible for the P.A.T.
  - iv) large-sized investment projects (above Ffr. 25m) or projects established by large-sized firms or foreign-owned enterprises with an annual turnover above Ffr. 500m. The aim here is to avoid excessive competition between regions for such projects and to achieve a greater degree of control over M.N.E. and large project location.
- In addition, (national) loan facilities will be made available for projects falling into the above four categories.
- other aids: The two fiscal incentives mentioned above will be retained and harmonised with the new aid system, to ensure that Community aid ceilings are respected.

Comments: Although further details concerning eligibility conditions for these aids are not yet available, it seems clear that they will be considerably less complex and specific than under the previous system, based as they are on the need to provide a greater degree of discrimination in favour of small/medium scale projects and rural locations.

It is difficult to foresee how the regions will react in practice to the new system. Although aid levels may be varied within designated areas it remains to be seen whether the regions will actually use the discretion at their disposal. Intra-regional political pressures and the desire not to be left out may, in practice, lead to maximum rates being made available over a large proportion of the designated area.

Another interesting aspect is the greatly increased scope for regional authorities to participate in the funding of investment projects. Again, this seems certain to lead to improvements in project financing especially for firms in the small/medium size range.

On the whole it would seem that two types of area in particular are to be favoured: i) industrial reconversion areas, and ii) less developed areas. The general aim seems to be one of 'dispersed development' and as such constitutes a refutation of 'growth-pole' concepts and the ability of such centres to 'spread' development to their hinterlands.



### 8.3.2. ITALY

#### General background

Some basic figures<sup>1</sup>: Southern Italy as % Italy

population(19.3m)	35.5%
GDP	24.0%
Southern Italy as % E.C.	
population	7.8%
active population	5.9%
unemployment	18.0%

Disparities in levels of economic development between Northern and Southern Italy are no new phenomenon. From the period after Unification in 1861, when substantially lower (Piemontese) external tariffs were imposed on what was then a very protected Southern economy, until the first real efforts to promote industrial development in the late 1950s, the history of the Mezzogiorno has been one of uninterrupted decline<sup>2</sup>. Southern industry suffered a severe setback between 1880 and 1901; between 1901-1936 Southern industrial employment declined by about 10% whilst there was a corresponding increase of around 50% in the North<sup>3</sup>.

By 1950, the pressure of population growth had made itself felt through acute poverty in the agricultural sector, characterised by the "pulverisation" of small holdings and much fragmentation.

The first attempts at closing the North/South gap were largely unsuccessful, and represented little more than a stop-gap measure to prevent mass migration from the land and rising unemployment. Between 1950-53, the newly created state fund for the South, the Cassa per il Mezzogiorno, concentrated its

---

<sup>1</sup>Figures for 1977; European Commission, Regional Development Programme, Mezzogiorno 1977-80, 1980. As the study points out, the population of the Mezzogiorno is therefore actually larger than that of five Member States, ie Netherlands, Belgium, Ireland, Denmark and Luxembourg.

<sup>2</sup>A somewhat fuller account is given by Bull(1978).

<sup>3</sup>Allen & MacLennan(1970).

efforts almost exclusively on agriculture and basic infrastructure<sup>1</sup>. Although it was hoped that investments in public works and infrastructure would help stimulate Southern industry, it soon became clear that much of the original investment in the South was largely to the benefit of industry in the Centre/North<sup>2</sup>.

In 1957 the main lines of an industrialisation policy for the South were laid, which included, (i) the introduction of investment incentives (profits tax exemptions, investment grants and soft loans) to induce firms to the South. These incentives were however highly selective and aimed at attracting large-scale projects to designated areas; (ii) the start of an industrial growth area policy, aimed especially at stimulating external economies; (iii) the decision to use the state-holding sector to promote Southern development. During the period 1958-69 its industrial investments accounted for some 34% of the Southern total<sup>3</sup>.

In 1965 the Cassa's funds were enlarged and the pattern of their use reflects the change in the emphasis of development policies. From 1950-65, 55% of expenditure went to agriculture, 33% to infrastructure and only 12% to industry. From 1965-70 industry obtained 48%, agriculture 17% and infrastructure about maintained its share<sup>4</sup>. Industrial incentives, however, remained largely selective.

Since 1971, there have been a number of changes. In the first place, growth-centre policy has been slowly abandoned -- from a policy of "dispersed concentration" to smaller centres (or nuclei) until 1976, to one of "diffused" development in aid of depressed and internal areas in the more recent period<sup>5</sup>.

<sup>1</sup>Of the Cassa's allocation for this period of around LIT. 570m, approximately 77% went to agriculture and the remainder to infrastructure. Moreover, efforts in the agricultural sector (accompanied by three reform laws and expropriation of land from large landowners) were based around farming units of five hectares or less which presented little hope for long term viability.

<sup>2</sup>The multiplier (Centre/North) for investment in the South was estimated to be 0.39 in the early 1950s, Martellaro (1965).

<sup>3</sup>Podbielski (1978).

<sup>4</sup>Bull (1978).

<sup>5</sup>See Ronzani (1978), pp. 136-9 for further details.

Secondly, the role of state-enterprise has been increased substantially. From 1957 to 1971, the state-holding sector was required to locate at least 60% of its new and 40% of its total investment in the South. After 1971 these percentages were raised to 80% and 60% respectively\*. Furthermore, public authorities and companies with state participation were required to place at least 30% of their supply contracts with firms located in the South.

Thirdly, incentives have become more generous and less selective. Greater emphasis is now laid on aids for small/medium sized enterprises<sup>1</sup>. The very substantial decline in the number of Southern enterprises operating in this size group from 1961-71<sup>2</sup>, and the correspondingly close association at the regional level with movements in manufacturing employment<sup>3</sup> must surely explain the increasing preoccupation with this issue.

A related point is that from the late 1960s onwards, wage-bargaining increasingly took place at a national level, in contrast to the previous period. To outweigh this effect, and as part of the overall strategy to increase employment in the South, a rebate system on social security contributions was introduced in 1968. In 1976 the concession was extended to cover the full amount of social security liabilities (which averaged around 27% of wage costs) for (net additional) labour hired after that date.

#### - The role of state industry in regional development.

Before turning to consider the actual results of this particular approach to development policy it is worthwhile to briefly consider the underlying rationale for state involvement<sup>4</sup>.

\*To be achieved by 1980. However, the somewhat higher 1971 targets were not in practice achieved.

<sup>1</sup>One example here is the Società Finanziaria Meridionale (FIME) created in 1971, which provides credit and various types of technical assistance, in particular to medium-sized autonomous enterprises.

<sup>2</sup>Banco di Roma, May 1973. <sup>3</sup>Bull (1978).

<sup>4</sup>The following discussion relies heavily on A. Shonfield (1965), p. 178 et seq., which still remains probably the best and most detailed account of the origins of state involvement in the Italian economy.

The Italian state holding sector is composed of a number of holding groups (IRI, ENI, EGAM, EFIM), of which the Istituto per la Ricostruzione Industriale (IRI), established in 1933, is the largest and most important<sup>1</sup>.

The IRI, it should be noted, is a "semi-public corporation". In a financial sense the state's substantial contribution to the group can be seen as a means of increasing the return on capital available for distribution to IRI's private investors. Without such intervention it is doubtful whether the IRI could have obtained the large amounts of money required for investment from the ordinary capital market.

"The final outcome would then have been that the group would have invested less in those of its enterprises which the stock market would have regarded as hazardous, either because they were old and in need of expensive reconversion or because they were too new to be trusted."<sup>2</sup>

The sheer size and diversity of the group provides another advantage -- the possibility of setting off profits in one sector against losses in other -- which together with the backing and assurance of the state, have made the IRI a safe vehicle for investment.

Commercial stability is helped by the coexistence of "complementary" sectors e.g. shipbuilding and shipping, which may lend mutual support by placing orders during slack periods. Moreover, the importance of certain base industries (e.g. steel, cement) in determining the efficiency and performance of other sectors of the Italian economy, has placed a high premium on competitiveness; at an early stage investment in modern plant and managerial stress on high standards of technical efficiency were deliberately used to hold down prices and improve product quality in strategic base sectors<sup>3</sup>.

Apart from some of the more obvious advantages of size (and diversity); for example, the ability to cope with projects in

<sup>1</sup>In 1963 the IRI employed 278,500 persons in some 120 companies, and by 1977 524,000 persons.

<sup>2</sup>Shonfield(1965), p. 189. In practice, a large part of IRI's operations fall into one of these two categories.

<sup>3</sup>Ibid.

high-technology sectors subject to risk, investments which necessarily take place over a relatively long time-scale, or projects which require coordination with other sectors or infrastructure works, there were certain other advantages in the field of management and worker training. Such advantages appeared through the availability of a 'large and varied complex of technical cadres' able to exploit new investment opportunities, and the ability to implement in-house training and retraining facilities<sup>1</sup>.

Given the somewhat paradoxical capacity of the state-holding sector to combine political and social obligations and objectives with shrewd business decision-making, state industry seemed well-placed to provide the necessary impetus to industrial development in the South. Pressure was certainly there for it to do so; in 1960, employment in state enterprise in the Mezzogiorno accounted for less than 18% of total state-sector employment. Moreover, Southern employment in industry at this time accounted for a mere 16.5% of total employment, as against 33.5% in the Centre/North, and the imbalance in the labour market was reflected in an annual average rate of migration from the South of around 223,000 persons<sup>2</sup>.

State enterprise responded by locating an increasing share of investment (and employment) in the South, noticeable from around the late 60s<sup>3</sup>. The relevant data for this period are given in the Table below.

From Table 1 it is evident that the 1971 targets set for the share of new and overall investment to be located in the South have never in fact been met. In terms of total investment, the share going to the Mezzogiorno reached its peak in 1972 and has since fallen continuously, in both relative and absolute (nominal) terms, whilst, overall, investment in the state holding

---

<sup>1</sup> Ibid., p. 189 & 187. "It is worth remarking that IRI, with ENI, are the only businesses in Italy which have engaged in any serious work of retraining workers. They are also the pioneers in management training." Ibid.

<sup>2</sup> Figures from Podbielski (1978), tables 20, 22.

<sup>3</sup> Employment in state enterprise increased from around 60th. units from 1960-65 to 85.6th. in 1969.

TABLE 1 : INVESTMENT AND EMPLOYMENT IN THE STATE-HOLDING SECTOR  
IN ITALY (Mezzogiorno and Centre/North).

(billion lire, current prices)

A. INVESTMENT				
	1969	1972	1975	1978 <sup>1</sup>
Mezzogiorno/rest Italy	338.1/592.7	1,139/941.1	1,145/1,941	1,136/2,769
<u>Total Mezzog.</u> as % Italy*	36.3%	54.8%	37.1%	29.1%
Industry <sup>***</sup> :				
Mezzogiorno/rest Italy	224.2/267.4	828.8/446.2	683.9/851.7	516.3/1,048
as % Italy	45.6%	65.0%	44.5%	33.0% <sup>2</sup>
Major sectors : Mezzogiorno as % Italy				
steel, metallurgy etc.	56.0	84.3	57.6	24.1
mech. eng.	49.4	52.1	40.0	32.4
of which electronics	-	(46.7)	(52.3)	(32.7)
oil & refining	38.2	19.5	21.3	37.5
petrochemicals & other chemical products	69.0	78.4	71.8	70.5
B. EMPLOYMENT				
Major sectors : Mezzogiorno as % total <sup>***</sup>				
steel, metallurgy etc.	23.6	32.3	31.5	34.0
mech. eng. & electronics	24.8	30.3	32.7	33.0
oil & refining	13.1	11.9	11.0	17.5
petrochemicals & other chemical products	45.1	52.6	55.0	50.8
<u>Total employment:</u>	85,600	140,400	183,700	191,000
<u>Mezzogiorno as % total:</u>	20.5%	24.0%	26.0%	27.6%

Source: Derived from Ministero delle Partecipazioni Statali, Relazione Programmatica, vol. 1, Rome 1980.

<sup>1,2</sup> Estimated percentages for 1979, 35.8% (total) and 41.7% (Manf.), from different source, vis. SVIMEZ, Rapporto 1980 sull'Economia, p. 117. Planned investment 1981, 45.8% (total) and 56.4% (manf.), Ministero Partecip. Stat. op. cit., p. 45.

\* Excluding foreign investment but including non-localisable investment.

<sup>\*\*\*</sup> Excluding construction and food.

<sup>\*\*\*</sup> From 1978 on, excluding workers operating abroad in oil & refining.

sector has increased considerably. In terms of employment, the relative capital-intensity of projects located in the Mezzogiorno is reflected in the fact that employment shares consistently remained considerably lower than investment shares, before and throughout the 1970s<sup>1</sup>.

Between 1971-74 over four fifths of state investment in the steel and chemical sectors was located in the Mezzogiorno; this represented on average more than half of overall and three quarters of industrial state investment in the Mezzogiorno.

In terms of additional employment, the effects of this investment surge were minimal -- only around 25,000 new jobs were created in steel and 6,000 in chemicals from 1970-75 at the cost of an average annual level of investment in these sectors of around £ 350 million (current prices<sup>2</sup>) between 1971-74.

The events leading up to the restructuring of base industry in Italy and its relocation towards the South, have already been described in chapter 5, and there is little to suggest that such investments were in general the outcome of a determined attempt to promote regional development. Rather, the decision to invest in the South was frequently taken on the basis of specific sectorial and locational considerations, in which the receipt of various investment subsidies (conditional on a southern location) presumably played an important role.

Lastly, state-enterprise has in general shown a high degree of selectivity as between the various southern regions. In 1978 around 70% of state industrial employment (excluding construction) was located in just two regions, Campania (ie the Naples region, with 45%) and Puglia (25%). Campania accounted for 81% of (Southern) state employment in mechanical engineering and 45% in electronics, whilst Puglia accounted for 60% employment

---

<sup>1</sup> As one author has noted: "Investment per employed was not only systematically higher in the south than in the whole of Italy but this difference increased progressively over the years." Podbielski (1978).

<sup>2</sup> Min. delle Part.Stat. - Relazione Programmatica, 1980, p.63. The employment figures refer to net (sectoral) rather than gross job creation. Estimates of investment cost per job in the early 70s suggest that "to create a job in chemicals or steel requires on average Lire 55.4million as against L. 5.6m. in the food industry and L. 6.4m. in engineering", A. Thiemes in:

in iron and steel<sup>1</sup>.

- Infrastructure policy.

There are at present two organisations responsible for the administration of special assistance for the development of Southern Italy.

(a) The "Cassa per il Mezzogiorno", which concerns itself with the administration of subsidies to industry, the management of the fund for subsidised credit to Southern industry, the implementation of special projects and industrial infrastructure works, and the provision of assistance through the medium of institutions and financing companies;

(b) the Governments of the southern regions, which are responsible for all intervention provided for by Article 117 of the constitution (particularly as regards agriculture, craft trades, public works), and also regional development projects to be carried out on the basis of ad hoc financing as part of special assistance<sup>2</sup>.

Expenditure of the Cassa from 1976-79 on credit and capital subventions and under the various forms of special assistance is given in Table 2 below.

A detailed breakdown of investment incentives is given in the following section. As concerns overall capital expenditure on infrastructure, it is to be noted that this increased very considerably as from 1974. From 1960 to 1967 average annual expenditure amounted to around Lit. 116 billion. This figure rose to Lit. 250 billion between 1968-73, Lit. 866 billion in 1974, Lit. 1,240 billion between 1975-77 and Lit. 1,560 billion in 1979<sup>3</sup>. In real terms infrastructure spending by the Cassa more or less levelled off after the mid-1970s, with more emphasis being placed on (the completion of) special projects.

<sup>1</sup>Min. delle Ppc. Stat., op. cit., p. 75. These three major sectors account for 68% of state industrial employment in Southern Italy.

<sup>2</sup>E.C. "The Regional Development Programmes", 1979, p. 144.

<sup>3</sup>Current prices, Cassa per il Mezzogiorno, Bilancio 1977, Appendice statistica, Table 113, p.187. Figures for 1979, Bilancio 1979, p. 34.



TABLE 2 : EXPENDITURE BY THE CASSA PER IL MEZZOGIORNO 1976-79  
(billion lire, 1975 prices)

	1976	1977	1978	1979
<u>Industry :</u>				
capital expenditure	<u>318</u>	<u>319</u>	<u>319</u>	<u>326</u>
<u>Infrastructure:</u>				
- industrial areas & nuclei	108	118	136	107
- workers housing	6	10	12	8
<u>Incentives:</u>				
- investment grants	204/(241)	191/(268)	171/(270)	211 <sup>*</sup> /(377)
- interest subsidies	(209)	(202)	(306)	(274)
<u>Special Projects</u> (capital expenditure)	<u>207</u>	<u>237</u>	<u>318</u>	<u>295</u>
<u>Regional activities</u> (capital expenditure)	<u>679</u>	<u>709</u>	<u>560</u>	<u>423</u>
- agriculture	189	195	140	94
- tourism	28	37	23	23
- aqueducts & drainage	182	179	163	111
- roads and communications	134	148	99	92
- areas of particular depression	105	99	79	51
- hospitals	15	29	35	27
- others	26	22	21	25
<u>other credit interventions:</u>				
- agriculture	(33)	(38)	(17)	(9)
- tourism	(32)	(35)	(34)	(33)
<u>TOTAL:</u>	1,204	1,266	1,197	1,044

=====

Source: Cassa per il Mezzogiorno, Bilancio 1977, 1978, 1979, Rome.  
(current prices) not included in total.

\*The increase over 1978 is mainly due to the speeding up of payment procedures (op. cit., 1979 p. 34).

The Cassa, it must be stressed, undertakes the implementation or financing of infrastructure works over and above normal state activities in this area. This particular organizational form was established in the 1950s to by-pass the normal channels of ministerial authority, since "this was considered to be the only way in which the co-ordination required for regional planning was capable of being secured"<sup>1</sup>. Under current proposals for reform, the responsibility for a large part of the Cassa's present activities will eventually be fully entrusted to regional levels of government.

In the past the Cassa has been criticised for tending to substitute for, rather than complement, the normal intervention of ministries<sup>2</sup>. This is perhaps unavoidable given that it is difficult to tell what would have otherwise been the extent of state infrastructure activity, and given that some expenditure categories of necessity overlap (e.g. hospitals, roads). A very large proportion of capital expenditure (see Table 2) is, however, directly related to productive investments.

As concerns industrial infrastructure, the Cassa undertakes or finances such works as the preparation of industrial land, the connection of industrial sites to energy sources, water supply and sewage, and the improvement of road and rail connections. The criteria governing such operations ensure that they are both necessary and closely linked with industrial installations, and furthermore, that their cost is proportional to the importance and value (also in terms of employment) of the industrial investments in question<sup>3</sup>.

General infrastructure provision in industrial areas and nuclei (there were some 46 of these in 1979) covers a wide range of activities including, general urban improvement works,

---

<sup>1</sup>Shonfield (1965), p. 197.

<sup>2</sup>Ronzani (1979), p. 137.

<sup>3</sup>E.C. Regional Development Programme, Mezzogiorno 1977-80, 1980, p. 61.

water supply and sewage, electrification, roads and rail links and ports.

Special Projects, introduced in 1971, were intended as general infrastructure schemes, developed on an interregional and inter-sectoral basis and designed to meet specific development or environmental objectives<sup>1</sup>. The vagueness surrounding their initiation and implementation means that their definition, in practice, is necessarily determined by what they actually do rather than what they might be doing. Several major fields of intervention may be singled out<sup>2</sup>; the depollution of the Gulf of Naples, water supply works, irrigation works, inter-regional road works, urban, industrial, tourist and more general infrastructure works. Certain projects relate to coordinated activities for specific development areas; for example, Project no. 2 for South-East Sicily comprises a wide variety of coordinated interventions in many sectors, ranging from port facilities, tourist development, industrial infrastructure and agricultural structures. In general, however, the projects are designed to eliminate major bottlenecks to further development, requiring substantial investment over an extended period, and necessitating a planned approach to project development including an assessment of both the costs and benefits of the works involved.

Finally, it should be remarked upon that Cassa expenditure directly related to agricultural infrastructures and incentives has constituted an ever diminishing share of total Cassa expenditure -- from over 55% in the 1950s, around 17% in the late 1960s to under 15% in the 1970s -- and reflects the turnabout in development policy discussed earlier.

This reversal was perhaps somewhat surprising and excessive in view of the importance of Southern agriculture in both

---

<sup>1</sup>For a good survey, see Podbielski (1978), ch. 5.

<sup>2</sup>See, Cassa per il Mezzogiorno, Bilancio 1979, Section II.

the Southern and national economy<sup>1</sup>. Lack of concern with the agricultural sector had also, by the late 1970s led to some very serious anomalies in the distribution of E.C. aid under the EAGGF Guidance section<sup>2</sup>. Some hasty changes were made in 1978 in an attempt to comply with Community agricultural directives and available resources were increased substantially for the period 1979-82<sup>3</sup>.

The general connection between infrastructure provision and incentive policy in the Italian case is quite clear. As one E.C. study remarked, 'by now "the South is well equipped with infrastructures in certain sectors: chiefly motorways but also, to a lesser extent, harbours and airports. This wealth of fixed capital is at present under-utilized in relation to its potential capacity and could therefore cope with a much higher volume of use than at present."<sup>4</sup> The following section will examine the incentive policies which should aim at obtaining maximum use from such investments.

#### - The main incentives.

There are four main industrial incentives currently available for projects located in the Mezzogiorno. They include capital grants, soft loans, social security concessions, and fiscal concessions. The details are as follows:

capital grants. This incentive, only available in the Mezzogiorno (see map), is more or less automatic in its operation, being available for a wide range of industrial

---

<sup>1</sup>Accounting for around 17% of regional product and 27% of employment and over 40% of gross marketable production. ISTAT and E.C. data for mid-1970s.

<sup>2</sup>Given the complete lack of any regionalisation of assistance the commitment (1964-74) for EEC assistance to projects in the Mezzogiorno amounted to only 32% of the total allocated to Italy. Moreover, actual expenditure amounted to only 15.4% of commitments, hence the Mezzogiorno actually received in the course of 11 years, some 19m. u.a. or approximately Lit. 13 billion. See E.C. Regional Development Programme-Mezzogiorno, 1980, p. 22/3.

<sup>3</sup>Ibid., p. 369.

<sup>4</sup>Ibid., p. 20.



Italy: Regional Policy Area Delineation.

Allen (1979), p.138.

activities<sup>1</sup> (including local resource based activities, which is in contrast to the French system). The level of the grant varies according to location and project size. Capital grants (covering the construction, re-opening or expansion of industrial installations) are calculated on the basis of a standard scale proportional to the cost of fixed eligible investments -- ranging from a maximum grant of 40% for an investment quota of up to Lit. 2,000m. to a minimum grant of 15% for an investment quota in excess of Lit. 15,000m. The grant is supplemented by one-fifth if the project is in a priority sector<sup>2</sup>, and by a further one-fifth if it is located

<sup>1</sup>Petroleum, base chemicals and synthetic fibre production (where capacity seems excessive) are at present "suspended" from eligibility.

<sup>2</sup>Around 30 are distinguished, mainly in high-growth and advanced technology sectors.

in one of the (designated) particularly depressed areas (i.e. max. = 56%). For projects in the largest size category, eligibility is decided by the CIPE (Interministerial Committee for Economic Planning), rather than the Minister for the South as is usually the case.

There are no particular employment conditions attached to this aid, and it is also worth noting that the number of cases where aid has been suspended is very low (around 3%).

soft\_loans. Loans at favourable rates of interest are granted through the "special credit institutes" (SCI) and various banks specialising in medium and long term credit. Since the procedure and conditions of award are determined by law it actually makes no difference which of the above bodies is approached.

Application procedure is similar to that for the capital grant and in practice both applications are considered together. The SCI examine the financial viability of the project and the application is then passed on to the Cassa which examines its eligibility, technical feasibility and further requirements such as infrastructure provision. Finally, the Ministry for the South checks conformity with national, regional and other territorial planning.

With respect to financing, the Cassa awards the interest subsidy from a special National Fund for Concessionary Credit to Industry. Some 65% of the resources of this fund are held over for the Mezzogiorno<sup>1</sup>.

The concessionary interest rate on these loans is set at 70% below the reference "market rate". The loans may cover up to 40% of project costs<sup>2</sup> and are only available to projects of

---

<sup>1</sup>Such schemes also operate in the insufficiently developed zones of the Centre and North but at less favourable rates of award. They are not considered here.

<sup>2</sup>Land purchase, land preparation and "technically necessary stocks", are eligible items under soft loans whilst they are not eligible for capital grants.

less than Lit. 15 billion<sup>1</sup> (in the case of extensions, including existing plant).

The maximum duration of the loan is 15 years for setting up projects and 10 years for other projects.

It is worth noting that under the two abovementioned schemes whilst, in general, projects are expected to be 30% "own-financed", for small projects in priority sectors and locations, up to 96% of project costs may eventually be covered by a combination of grants and loans.

fiscal concessions. Tax concessions are available in the Mezzogiorno, taking the form of rebates or exemptions on company profits. Companies in Italy currently have to pay two direct profit taxes, i) the ILOR, a tax of 14.7% on all types of income including profits, and ii) IRPEG, a specific company profit tax of 25%.

Two concessions relate to the ILOR; the first involves full tax exemption for 10 years for all profits arising from eligible industrial projects located in the Mezzogiorno and in the aided areas of the Centre/North<sup>2</sup>; the second is an exemption of up to 70% of profits made anywhere in Italy but reinvested in (SCI-financed) projects in the South.

The third concession is restricted to new enterprises with headquarters also established in the Mezzogiorno. It takes the form of a rebate of 50% of IRPEG tax liabilities, for 10 years starting from the time profits first arise (as with the ILOR concession).

Application for these awards is straightforward (through the tax authorities) and the award follows automatically through the tax system.

No figures are available on the cost of this particular incentive.

---

<sup>1</sup>This ceiling is due to be increased in line with inflation and projects over this size are also to become eligible for (non-concessionary) loans after the first Lit. 15 billion.

<sup>2</sup>In these areas only small/medium sized firms are eligible.

Social security concessions. This subsidy is relatively automatic in its functioning and at present consists of a full rebate on social security liabilities for all labour hired (after 1 July 1976) in excess of the employment level at that date. The concession which is non-project related and only available in the Mezzogiorno is due to expire in 1986. Previous schemes (see "background") expired in 1980. The cost of this particular aid is worth noting; in 1975 alone rebates in the order of Lit. 701 billion were handed out, representing around one half of all expenditure on regional incentives -- the rest accounted for by investment grants and interest subsidies.

Results: Table 3 below gives the relevant information concerning capital grants awarded, and associated investment and employment in the Mezzogiorno for the 1970s. Although the figures only relate to capital grants, as we have seen, a project qualifying for this aid will in most cases also benefit from the remaining incentives outlined above. Hence, whilst the job creation figures in Table 3 are probably a very close approximation to the overall level of new employment aided by the main incentives, the actual level of subsidy (as well as the level of associated investment<sup>1</sup>) is certainly much higher than the above figures would suggest.

Overall the figures suggest a higher and fairly sustained effort in terms of expenditure after 1971. In terms of associated employment, however, there would appear to be little, if any, corresponding improvement. Of note is the substantial decline in the amount of awards and associated employment in 1979.

Table 4 gives the regional breakdown of aided employment associated with investment subsidies from 1950 to 1979. The figures are subdivided into two areas, 1) Southern Italy, and

---

<sup>1</sup>This occurs because of the wider coverage of soft loans as compared to grants.



TABLE 3\*: VALUE OF CAPITAL GRANTS, ASSOCIATED INVESTMENT AND JOBS AIDED IN THE MEZZOGIORNO OVER THE 1970s

Capital grants / year	value of grants awarded <sup>1</sup> (billion lire) current prices	/ associated / investment <sup>2</sup> (billion lire) current prices	jobs forecast <sup>3</sup> ( '000s)
1970	53.4	377	69.7
1971	61.7	393	98.1
1972	134.3	884	103.3
1973	207.0	1,170	80.9
1974	363.6	2,020	69.6
1975	296.9	1,272	79.6
1976	337.4	1,253	n.av.
1977	334.9	1,454	60.8
1978	622.8	2,196	65.8
1979	449.2	1,618	36.5

Total 1970-79

approx. = 700,000 jobs.

\*Note: The figures above relate to awards. Since there is always a lag between awards made and payment or investment, the above figures may not coincide with grants paid, investment realised or jobs created over the period considered.

Source: Cassa per il Mezzogiorno, Bilancio, Appendice statistica, Relazione, various years.

<sup>1</sup>The figures are not comparable with the previous table since they concern authorized awards rather than actual payments in any one year (Table 40c), 1977, op. cit., and table 24, Relazione 1978/9.

<sup>2</sup>To 1977, Table 40b, 1977, op. cit., for 1978/9 Table 24, Relazione.

<sup>3</sup>To 1975 App. stat. Table 17, from 1977 on, Relazione, various, table 24. No figures traceable for 1976.

ii) the regions of the centre which are also covered by the main regional incentives. For the Southern regions we compare the share of jobs aided with a standardisation measure, that is, the regional share of southern population. This has not been possible for the Centre regions, as we have no knowledge of the actual population covered in these partially classified areas<sup>1</sup>.

Taking firstly into consideration the South it is to be noted that four of the eight regions have consistently maintained a level of job "creation" roughly proportional to their size (i.e. Campania, Puglia, Basilicata, Sardegna).

In contrast, the two southernmost regions, Calabria and Sicilia have consistently maintained a level of aided job "creation" at roughly one half of this level.

The northernmost region, Abruzzi, has on the other hand consistently maintained a substantially higher level of job "creation" relative to its size; a tendency which appears to have strengthened in the past few years.

Perhaps one of the most remarkable findings, however, is that the classified areas of the centre regions (Toscana, Marche, Lazio) accounting for less than 7% of the Mezzogiorno have accounted for such a large proportion of overall aided employment creation -- 16.1% from 1950-75 and 18.6% from 1977-79.

On reflection however, it is not particularly surprising, especially given that over 60% of aided jobs have come from new establishments rather than extension projects, that a policy which provides the same level of subsidy in more developed Central regions<sup>2</sup> as in less developed peripheral regions should be more effective and attract more projects in the former than in the latter. There would seem to be a good

---

<sup>1</sup> There is a certain ambiguity here since the term "Mezzogiorno" generally refers, in normal usage, only to the regions of the South listed above. The area of activity of the Cassa does not otherwise conform to any statistical or administrative unit.

<sup>2</sup> In 1970, for example, G.D.P. per head in Lazio was 11% above the national average whilst Calabria had a level of GDP per head of some 52% of the national average. E.C. Basic statistics 1975-76.

TABLE 4 : EMPLOYMENT ASSOCIATED WITH INVESTMENT SUBSIDIES  
AWARDED BY REGION, 1950-1975 and 1977-1979 (inclusive)

Region	<u>1950-75</u> jobs aided as % sub total for South	<u>1977-1979</u> jobs fore- cast	<u>1977-1979</u> jobs fore- cast as % sub total for South	population as % South (1979)
Mezzogiorno <sup>1</sup>				
Toscana (Elba))		215	(	
Marche )	16.1% of	5,986	( 18.6% of	
Lazio )	- total	24,152	( total	
South (sub total):				
Abruzzi	8.5%	24,176	18.2%	6%
Molise	1.1%	4,639	3.5%	1.7%
Campania	35.4%	40,322	30.4%	27%
Puglia	23.6%	26,371	19.9%	19%
Basilicata	2.9%	3,895	3 %	3%
Calabria	4.0%	8,347	6.3%	10%
Sicilia	13.4%	17,287	13.0%	25%
Sardegna	11.0%	7,753	5.8%	8%
= 100 % total= 163,143 = 100 % = 100%				

<sup>1</sup>As defined by the area of activity of the Cassa per il Mezzogiorno, which includes only some parts of Toscana, Marche and Lazio.

Source: Cassa per il Mezzogiorno, 1975 tav. 20, 1977/8/9, tav. 24.

case for increasing the spatial selectivity of the main incentives in favour of the more peripheral regions where presumably the negative influence of locational factors (e.g. distance costs) is more hard-felt than elsewhere.

In conclusion, the approach to regional development policy in Italy is probably the most comprehensive of any country in the European Community. In particular, the role given to state-holding enterprise stands out as a unique experiment in regional planning -- even if its results still need to be assessed with a good degree of caution. The establishment of a development agency (the Cassa per il Mezzogiorno) with substantial funds and direct responsibility for industrial and strategic infrastructures, is another unique and successful feature of Italian policy. Finally, the extent to which industrial infrastructure needs are assessed and provided for in combination with the award of investment incentives (as we have seen, this forms part of the application process), is an important feature which is notably lacking in many other countries.

### 8.3.3. REPUBLIC OF IRELAND

#### Background.

The Republic of Ireland represents a unique case in the Community insofar as for aid purposes, the entire national territory qualifies for aid under the E.R.D.F. Although there are indeed significant regional differences within Ireland (see Chs. 1 and 2) many of the fundamental economic difficulties facing the country are national rather than regional in character. Indeed, in terms of the level of economic development, GDP per head in Ireland is less than one half of the Community average.

Out of a present population of almost 3.2 million, some 20% of the workforce is still employed in agriculture. The very substantial rate of population growth over the 1970s (around 1 1/2% per annum) combined with the effects of selective migration over the 1950s and early 1960s, have resulted in an extremely skewed population structure and a high dependency ratio -- around one half of the Irish population is now below 25 years of age.

In budgetary terms the relatively small tax-yielding population base and the needs of providing adequate basic infrastructure over a sparsely populated area, together with efforts of promoting industrial development have placed a severe burden on public finance and the balance of payments<sup>1</sup>.

Problems of industrial adaptation have added to the task. In 1966 the Anglo-Irish Free Trade Agreement (AIFTA) and in 1973 the accession of Ireland to the EEC and Customs Union, placed many traditional industries which had been built up under tariff protection, on a very precarious footing<sup>2</sup>.

Adaptation has required a substantial increase in productive investment -- in 1960 the investment ratio was only 14%,

---

<sup>1</sup>The Exchequer's borrowing requirement had reached 14% of GNP by 1980, and the balance of payments deficit 10% of GNP in 1979.

<sup>2</sup>"The process of adaptation combined with the effects of recession and inflation resulted in almost 43,000 'qualified' redundancies in the three years to 1976 and a steep rise in the unemployment rate", E.C. Regional Development Programme - Ireland, 1977-80, 1978, p. 67.

but had risen to 24% by 1976, reaching 27% in 1977. Official sources estimated that a figure of nearer 31% would be required to generate the additional employment necessary to compensate for redundancies caused by structural adaptation and growth of the working population<sup>1</sup>.

Whilst the development of industrial policy in Ireland can therefore be seen in a primarily national context, there is nevertheless a certain level of discrimination in favour of the least industrialised and less developed areas. A brief account is given below.

In 1969, the introduction of the Industrial Development Act produced most of the significant changes which are still at the basis of present policy. In particular the Industrial Development Authority (IDA), which had been formed in 1950, was reconstituted as an autonomous state-sponsored organisation with the major responsibility for investment grant awards and the promotion of industrial development. The two major incentives at this time were i) 100% tax relief on export profits from manufacturing activities for a 15 year period (and partial relief for a further five years), and ii) capital grants with a 10 to 15 percentage point differential as between Designated<sup>2</sup> and Non-Designated Areas; not available for new projects (until recently) in the Dublin area. In practice the level of discrimination in favour of the less developed areas has been fairly high. This arises firstly from the differential element in the regional grant and secondly from the planning strategy of the IDA itself, in favour of such areas.

In terms of physical planning and infrastructure policy, it is notable that the swing towards growth-area policy in

---

<sup>1</sup> Ibid., pp. 20 and 63.

<sup>2</sup> An area in the West and South West covering 57.7% of the national territory and one third of the total population.

the late 60s<sup>1</sup> (similar to both France and Italy) was never in fact implemented. Moreover, from 1972 onwards, the Government has continued to follow a policy of dispersed development.

Physical planning in Ireland, no doubt because of the nature of the problems at hand, tends to be undertaken at national rather than regional level. Nevertheless there are quite important regional implications, and the aim is to secure a balanced development of all parts of the country.

Stated objectives include; a major road development plan for the 1980s, the creation of additional port facilities in Cork and Dublin, the improvement of the telephone service and facilities for telex and data transmission, and the formulation of a comprehensive energy policy<sup>2</sup>.

A final point to note is that infrastructure provision and industrial planning and development tend to be closely linked, partly due to the close contact between the IDA and local authorities, and partly due to the fact that the provision of government sponsored new and "advance" factories is largely the responsibility of the IDA.

---

<sup>1</sup>The Buchanan Report in 1968, identified nine medium-sized towns sufficiently removed from Dublin to act as counterweights to the growth of the capital. For a fuller discussion see H. O'Neill, "The case for concentration", Irish Banking Review, Sept. 1973. An important factor is to be borne in mind is the extremely weak urban base in Ireland -- in 1971, apart from Dublin, only seven towns had a population exceeding 20,000, and only a further nine towns had a population exceeding 10,000. As the abovementioned author commented, "One finds it difficult to believe that they (the Government and the IDA) are seriously suggesting that we live in the cities and commute to the countryside to work." Ibid., p. 20.

<sup>2</sup>E.C., ibid., annex 4.

### The main incentives

Incentives administered by the IDA fall under several headings. Between 1973-77 almost three-quarters of total expenditure (of around £ 77 million per annum) was accounted for by the new-industry and major-expansion programme, whilst a further one-fifth was attributable to the re-equipment and modernisation programme<sup>1</sup>. A third programme which has seen increasing use in the past few years relates to new and existing small firms. These schemes will be considered in more detail presently. Other schemes, although of relatively small significance in terms of expenditure, are primarily of "strategic" importance and include: (i) the promotion of joint-ventures between Irish and overseas companies, (ii) grants towards the current costs of R & D projects, negotiable up to a maximum of 50% of such costs or £ 50,000 per project, whichever is the less (in-house project "feasibility" studies are also eligible for grants up to a maximum of 1/3 of costs), (iii) the service-industries programme which assists firms providing services which were previously imported, or which are able to secure business outside Ireland whilst providing employment within the country (mainly involving engineering and architectural consultancy and computer software); (iv) the Enterprise Development Programme (started in 1978) designed to assist first time entrepreneurs with suitable experience to establish their own manufacturing businesses; (v) under the Industrial Development act (1969), the IDA is also empowered to offer interest rebates, loan guarantees and take equity in firms -- these powers have been used extensively as from around 1977, and in 1980, total tax based lending represented around 17% of total direct funding of industrial policy<sup>2</sup>.

---

<sup>1</sup>Yuill et al (1980), p. 120.

<sup>2</sup>Irish Business, August 1981.



- IDA capital grants

(i) New industry and major expansions programme. Under this scheme, non-repayable grants are available towards the cost of fixed assets, defined as site, site development, buildings, new machinery and most equipment. Grants are negotiable up to the following legal limits:

- in Designated Areas, 60% of eligible costs
- in non-Designated Areas, 45% of eligible costs.

The basic-level of these grants is 40% and 25% respectively. An additional "top-up" of up to 20% may be negotiated if additional criteria are met, including, high-skilled job content, high degree of local linkage, high growth potential, and technological and scientific content.

Eligibility conditions state that the investment must be of a reasonably permanent nature and employment must be either created or maintained. Until recently most investments faced explicit "aid-per-job" limits.

(ii) Re-Equipment/modernisation of existing industries programme. Under this scheme grants are made available towards the cost of modernisation of plant and machinery in existing firms. The grants are payable up to a maximum of 35% of eligible costs in Designated areas and 25% elsewhere.

There are no specific employment conditions, but employment levels are at least expected to be maintained. Lastly, re-equipment grants may not exceed £ 850,000 except with government approval.

The above grants may be supplemented by other eligible forms of IDA assistance but only up to the administrative maxima already noted.

(iii) Small industries grant. Similar in operation to the new industries programme, and available to both new and existing small firms, with up to 50 employees and fixed assets of £ 400,000. Maximum rates of award are 60% in Designated areas and 45% elsewhere.

### Fiscal incentives

In 1978 a new scheme was announced to replace the existing system of export-profits relief. From 1 January 1981 until 31 December 2000, Corporation Profits Tax for all manufacturing industry is reduced to a new flat rate of 10%. Even so, the 100% export-profit-tax-relief scheme (outlined earlier) continues to remain of interest, not least because it will continue to remain available until 1990 for companies already in receipt of it.

### Main results

The main (official) results for the 1970s can be summarised as follows<sup>1</sup>:

- planned investment by IDA grant-aided firms came to £ 2.677 million from 1970-1980. Grants totalling £ 831 million were committed to these projects;

- Job approvals associated with this investment amounted to 192,380 (net of known cancellations), of which 99,000 or 51% were in domestic firms<sup>2</sup>.

One of the problems involved in interpreting these figures is that there has been little systematic verification made by the IDA to ascertain whether, and to what extent, the job creation targets of firms in receipt of IDA assistance have actually been met; or, if such targets have indeed been met, whether they have in fact been maintained over a certain period of time.

Table 5 gives a breakdown of the relevant figures for 1979, a year in which figures were also available on the actual level of grant-aided job creation (column 4). Of particular note in Table 5 is the relative success of IDA policies

---

<sup>1</sup>IDA, Annual Report 1979.

<sup>2</sup>Job approvals in small firms (mainly domestic) increased significantly as a proportion of the total -- from 9% of total approvals in 1970-1 to some 8,240 jobs or nearly 25% of total approvals in 1979.

**TABLE 5 : REGIONAL BREAKDOWN OF IDA GRANT COMMITMENTS, JOB APPROVALS AND JOB CREATION IN 1979 <sup>1</sup>**

	1.	2.	3.	4.	5.
REGION	Manufacturing employment Jan. 1978	IDA grant commitments in 1979 (£ m)	Job approvals 1979	Grant aided jobs filled in 1979 <sup>2</sup>	Actual change Jan.1978-Jan.1979
Donegal <sup>**</sup>	6,100	3.6	820	500	290
North West <sup>**</sup>	4,400	6.1	1,208	420	200
West <sup>**</sup>	13,700	10.5	1,935	1,140	1,100
Mid-West <sup>*</sup>	17,950	37.6	4,978	1,350	1,590
South-West	36,000	28.4	4,644	1,680	1,420
South-East <sup>*</sup>	25,850	22.6	3,929	2,750	1,360
East	96,500	84.3	13,185	5,270	-1,470
North-East <sup>**</sup>	17,000	12.6	2,183	1,290	700
Midlands <sup>*</sup>	12,150	10.8	1,588	1,780	890
<b>TOTALS</b>	<b>229,650</b>	<b>£m 216.4</b>	<b>34,470</b>	<b>16,240</b>	<b>6,080</b>

1979: Grants commitment per job approved = £ 6,280 <sup>3</sup>.

Grants commitment as % planned investment <sup>4</sup> = 43.2%.

<sup>\*\*</sup> Designated Area

<sup>\*</sup> Part of region in Designated Area

<sup>1</sup> Source: derived from IDA, Annual Report 1979, p. 25-27, and IDA, Industrial Plan 1978-82, p.46.

<sup>2</sup> Gross job creation in 1979 came to 23,590.

<sup>3</sup> Grant commitment per job approved varied from £ 2,964 in domestic small industry to £ 7,063 in new overseas industry.

<sup>4</sup> Planned investment associated with IDA grant commitments totalled £ 501m. in 1979.

in the least developed and sparsely populated regions along the West Coast (Donegal, North-West, West), where new job creation in 1979 represented between 8.36% and 9.5% of 1978 employment levels (Ireland = 7%).

The number of jobs "created" in this year (16,240) must however be seen against a level of job approvals of some 18,000 in 1976, 24,000 in 1977 and 30,000 in 1978. Even allowing for reasonable lags between investment and job creation<sup>1</sup>, the figures for 1979 would appear rather low.

As the IDA themselves admit "under the New Industry programme some 60% of the expected jobs on average are translated into actual jobs in five years"<sup>2</sup>.

However, since grant payment takes place in stages (shortly after bills are submitted to the IDA), one would expect investment, job creation and grant payment to bear a fairly close relationship.

Nevertheless, it would appear that for the period 1970-78, whilst job creation ran proportional to grant payment for foreign-owned companies in Ireland, for domestic companies "only 14% of approved jobs exist (in 1981) while 45% of approved grants were paid"<sup>3</sup>. Consequently, the true "grant-cost per job created" in domestic industry may be considerably higher than Table 5 would suggest, and an independent survey has estimated a figure of around £ 15,700<sup>4</sup>.

Whilst it is true that where projects do not commence, no grant is paid, it should be taken into account that a large part of the award may often be versed towards site development, buildings and installation of machinery, before any significant employment creation actually takes place.

---

<sup>1</sup>In France the maximum "lag" permitted is 3 years, in Ireland over 5 years.

<sup>2</sup>IDA, Industrial Plan 1978-82.

<sup>3</sup>Irish Business, August 1981 - Summary of report commissioned by the National Economic and Social Council (unpublished).

<sup>4</sup>Ibid.

In some respects the important drive by the IDA over the 1970s to attract foreign manufacturing companies to locate in Ireland, is worth considering in more detail.

In 1980 foreign companies employed around 80,000 workers in manufacturing or some 34% of the total workforce. Between 1970 and 1978, however, out of a total of some 77,000 IDA job approvals (net of cancellations), only 28,900 jobs (i.e. 38%) were actually in existence by 1981. Around 60% of the job gap is estimated to be due to companies never reaching job targets, and a further 40% due to companies reaching targets and not sustaining them<sup>1</sup>.

In general, whilst representing a substantial share of manufacturing employment and exports (around 75% in 1980), foreign firms have done little to promote local production linkages. Moreover the internalised nature of their activities generally serves to exclude this possibility from the start<sup>2</sup>. In 1976 84% of components and other supplies purchased by foreign firms were imported. Length of stay tends to make little difference -- companies with plants in production in Ireland for over 10 years purchased only 2% more of their supplies domestically than recently established firms<sup>3</sup>.

---

<sup>1</sup>Ibid. Overall, 38,500 new jobs have been created by foreign companies since 1973, but net job creation has been considerably lower given that there have also been some 17,000 redundancies in this sector since that date.

<sup>2</sup>See discussion of this issue in part III.

<sup>3</sup>Ibid.

#### 8.3.4. Deglomeration policies

Within the present European Community, there are some four countries which operate restrictive regional policy measures. There are generally two major objectives involved in these various approaches. The first is to reduce congestion (or internalise congestion costs) in the main agglomerations by placing certain restrictions (taxes) on the development of new industrial/service sector activities. The second and related aim, is often to provide a complement to regional incentive policies by increasing the volume of "mobile" investment which is constrained to move out of the congested or central areas (the "carrot and stick" effect).

The normal procedure is that a firm wishing to commence a new or extension project (i.e. leading to an increase in surface area) must in the first instance apply for a permit and/or pay a tax. Where only the permit system operates (i.e. UK) and a refusal is legally binding, the alternative is then either to abandon the project or to locate it elsewhere.

A brief description of controls operating in the late 1970s is given below:

France: The two instruments which exist here apply only to the Paris region. The first, termed the "Agrément", is a surface area based permit system, such that once a firm exceeds a given level of floor-space in a controlled area, all further extensions become subject to permit approval. The fiscal side of the system comprises a congestion differentiated tax ("Redevance") on all new industrial and office floor space in the Paris region (apart from zero-rated peripheral areas of this region). The "Redevance" is paid irrespective of the need to obtain an "Agrément", although clearly if an "Agrément" is not obtained, the project cannot proceed.

The procedure for award of a permit generally tends to avoid direct refusal and subsequent risk of abandonment. The individual bargaining process which often ensues, tries to ensure that "some projects will be relocated in return for others being approved, which provides new employment both in

Paris and the provinces"<sup>1</sup>.

Decisions (and bargaining) on the "Agrément" are arrived at by considering the individual merits of the case in question. Two main criteria are involved<sup>2</sup>:

(i) the mobility potential of the new project. This is seen to depend on, firstly, the size of the project; secondly, the size of the applicant firm, which is indicative of the capacity of the firm to relocate the new project or some other part of its operations outside the Paris region.

(ii) The second criterion relates to the so-called "nobility" of the project. Generally speaking, projects involving high-level national or international functions have been considered justified in having a central location on two counts; in the first place they enhance the role of Paris as a centre for national and international headquarter functions; in the second place, they are considered to be less mobile "given the lack of suitable high-quality labour outside Paris and the unwillingness of this type of labour to move out of Paris"<sup>3</sup>. The circularity of this last argument is surely self-evident.

On the other hand, "non-noble" activities with a high proportion of low-skilled labour are considered more mobile since suitable labour could easily be found in the provinces.

Moreover, this process of functional selectivity has been further strengthened via the bargaining procedure mentioned above - in practice, new projects involving "noble" activities may be approved in return for the relocation of new or existing "non-noble" activities (activités banales)<sup>4</sup>

The system described above has been subject to increasing criticism over the past few years<sup>5</sup> not least because of

---

<sup>1</sup> Allen (1978), p. 192.

<sup>2</sup> See *ibid.*, p. 189.

<sup>3</sup> *Ibid.*, p. 188.      <sup>4</sup> E.C. "Deglomeration policies in the European Community-a comparative study". Regional Policy Series No 18, 1981, p.180.

<sup>5</sup> Although it has been in operation in more or less the form described since around 1960.

its high degree of functional selectivity. This is especially brought out in the findings of one study which suggested.. " a strong link between procedural features of the Agreement and the problems of small firms, the decline of low-skilled occupational groups and, at least until the mid-sixties, a stricter treatment of the manufacturing sector."<sup>1</sup> Ironically, whilst smaller firms are in theory less mobile, they are also less able to reach a "bargained" solution, which is reflected in correspondingly higher refusal rates for applications from smaller firms.<sup>2</sup>

At present, a substantial degree of change in the operation of both the Agreement and Redevance seems imminent.

The principle changes proposed include:<sup>3</sup> i) "softening" of the Agreement, ii) suppression of the Redevance vis industrial projects, iii) increases in the Redevance tax with respect to offices and research laboratories. (to Fr 1,300 m<sup>2</sup>).

The industrial tax had remained fixed at between FFr 25 to FFr 150 per square metre since 1971, and by 1981 represented probably less than 5% of construction costs.<sup>4</sup>

Furthermore, central administration is now being actively encouraged to think in terms of decentralisation; this has been achieved by prohibiting further expansion of civil service establishments in the Paris region and requiring all ministries to present plans for decentralisation.<sup>5</sup>

In conclusion, considering the very substantial qualitative regional differences in employment structure noted in Chapter 5, revised French deglomeration policy seems finally set to match regional problems with adequate policies, and marks an important change from a system which effectively set workers to the provinces whilst maintaining the main centres of decision making in Paris.

---

<sup>1</sup> ibid p.181      <sup>2</sup> ibid table 43      <sup>3</sup> Le Monde, Dec.1st, 1981

<sup>4</sup> ibid      <sup>5</sup> It is notable that public establishments are also liable to pay the Redevance; in 1980 around one half of the FFr 105 million tax revenue came from this source.



ITALY

Italian deglomeration policy works on a similar two-tier basis. In the first place under the 1971 Mezzogiorno law, "quoted companies with equity capital of more than Lire 5 billion must inform the Ministry for the Budget and Economic Planning of their investment plans. In addition, any expansion of plant in excess of Lire 7 billion must be communicated to the Ministry."<sup>1</sup> If the Italian authorities do not give a reply within three months of submission, the investment plans are allowed to be carried out. Investments realised in spite of a negative decision become subject to a tax equal to 25% of the cost of the investment.<sup>2</sup>

The "Authorisation" requirement applies to the whole of Italy and, furthermore, all public companies require authorisation.

Where authorisation is required firms must apply to the Ministry of Budget and National Economic Planning. This body will then submit a report on the project to the CIPE<sup>3</sup> which is responsible for the final decision.

In practice there are a number of problems with this system. In the first place, given the wide spatial coverage of this control it is often difficult for local authorities, when planning permission is requested, to determine whether or not an Authorisation is also required. In particular it may be much more difficult to check whether exemption limits are surpassed when factors such as firm size, investment cost must be assessed, than under a system which sets floor-space control limits.

---

<sup>1</sup> Trans. Ronzani (1979), p. 143

<sup>2</sup> This is notably in contrast to the French system where, as we have seen, the tax must be paid whether or not a permit is given.

<sup>3</sup> Comitato Interministeriale per la Programmazione Economica.

In granting the Authorisation factors which in practice tend to be taken into account include; employment aspects and labour availability, physical congestion, environmental implications. See Allen(1979) p.199.

This problem is of less importance in the South however, since projects in receipt of regional incentives will automatically pass through the CIPE or Ministry for the South, which check conformity with Authorisation controls. In practice, for large projects the CIPE will decide upon Authorisation and incentive awards simultaneously.

At this point it is worth outlining the initial intention behind the Authorisation system. In the first place the aim was to provide a source of information on investment plans and give the authorities scope for initiating a "planned bargaining" procedure between the state and individual firms. In exchange for locating in a state-preferred area (ie the South), the authorities would negotiate an appropriate "package" of infrastructure provision and investment incentives. In 1976 however, changes introduced in the incentive system for the South removed the discretionary element in the granting of awards for large projects, thereby putting an effective end to the implementation of "bargaining" procedures.

Given the administrative problems outlined above, the lack of explicit area delineation or the establishment of any sectoral priorities, it is perhaps not too surprising that the Authorisation has never really developed into a major instrument of Italian regional policy.<sup>1</sup> Whereas initially, the project tax was meant to constitute the "stick" in planned bargaining agreements, administrative problems reflected in an overall refusal rate<sup>2</sup> of a mere 2.7% have effectively diffused even this aspect of locational control. It is by now no means clear whether the policy as a whole can function either as a relocation instrument (for which it was intended), or as a decongestion instrument (for which it is clearly not suited). In contrast the French system appears to be able to combine both of these policy objectives.

---

<sup>1</sup> See Ronzani (1979) p.143.

<sup>2</sup> E.C. "Deglomeration policies in the European Community", 1981, p.211.

### Comparative analysis

As one comparative study of E.C. deglomeration policies points out<sup>1</sup>, " it is important to note that no country has based its control policy solely on a tax scheme, and that in none of the countries has the tax component played a dominant role or effectively contributed to the attainment of regional policy (as opposed to agglomerational) objectives".

Surely the new guidelines for French disincentive policy form a notable exception, and indeed there is no reason why a well-defined policy (tax) aimed at balancing 'social' and 'private' costs in congested areas should not operate independently as an effective tool of regional policy. The only explanation why this has not been done up to now is either, firstly that governments do not really believe in negative externalities, or, secondly, that they are afraid of possible inflationary consequences. Neither argument is particularly convincing.

One clear advantage of tax penalties is that the choice of whether or not to locate in a congested area is ultimately determined by the firm itself, taking into account perceived gains. Furthermore, if tax revenues are used to provide incentives in less developed or problem regions, the tax paying firm which chooses to locate in a congested area is in no position to claim that production costs have been unduly increased, given that alternative low-cost locations have been made available.

Whilst tax penalties/incentives may be seen as cost neutral, and by taking into account 'social' costs achieve greater welfare gains, the reasoning behind permit systems is less clear. Moreover, it is probable that under adverse economic conditions, the indiscriminate use of permit systems would lead to as many projects being abandoned as relocating, and evidence would suggest<sup>2</sup> that the current recession has led to relaxation of permit systems to the point where they may be said to have ceased to exist.

---

<sup>1</sup> E.C. op.cit. p.211

<sup>2</sup> *ibid* p.184.

Section 8.4. A comparison of the value of incentives and total national expenditure on regional policy.

The purpose of this section is to put the relevant figures given in the previous tables on a comparative basis and provide a set of reference data on which to make a somewhat preliminary assessment of the various policies.

The following table provides a comparison of the effective subsidy values of incentives in the top priority regions of the respective member states. The values are expressed in terms of standard valuation measures, that is, in relation to initial capital costs, annual capital costs and value added. The general method for obtaining these results was outlined in the introduction to this chapter and will not be repeated here. Suffice it to note that the transition to annual capital costs requires certain assumptions to be made regarding asset lives and capital cost mix, and the transition to value added requires further assumptions on the capital-labour ratio. Hence, the values given below may in reality vary somewhat from project to project.<sup>1</sup>

The figures are taken from the European Regional Policy Project, and in general refer to the maximum combined value of incentives available in 1975. A point to note is that capital grants invariably form the most important element of the incentive 'package', and range in value from 2.7% of value added in Luxembourg to 8.9% in Italy. In terms of spatial differentiation within countries the degree of net advantage bestowed on l.d.r.'s varies significantly from case to case. In

---

<sup>1</sup> In fact several aids are not included in table 6 due to various problems of estimation; these include i) export profit tax relief in Ireland, ii) social security concessions in Italy, iii) local business tax concessions in France.

Table 6.

Effective subsidies as a percentage of various denominators -  
maximum rates and maximum incentive combinations by top priority  
region in each country.

## EFFECTIVE PERCENTAGE SUBSIDIES

COUNTRY	MAIN PROBLEM REGION	INCENTIVE COMBINATIONS	INITIAL CAPITAL COSTS	ANNUAL CAPITAL COSTS	VALUE ADDED
Belgium	Development Zones	CG+IS+AD	11.3	10.1	3.3
Denmark	Special Develop- ment Regions	CS+IG	15.4	13.8	5.2
France	Award Zone 1	RDG+SDA	13.5	12.2	3.7
Germany	Zonenrandgebiet	IA+IG+SDA	18.2	15.5	5.3
Ireland	Designated Areas	IDA grant + IA	34.7	32.1	10.0
Italy	Mezzogiorno	CG+NSL	46.3	41.7	12.1
Luxembourg		CG+TC	7.8	7.1	2.7
Netherlands	Development Areas	IPR+AD	15.9	13.7	4.9
United Kingdom	Special Develop- ment Areas	RDG+IRG	21.5	21.7	4.8

Incentive keys:

Belgium: capital grant (CG); interest subsidy (IS); accelerated depreciation (AD)

Denmark: company soft loan (CSL); investment grant (IG)

France: regional development grant (RDG); special depreciation allowance (SDA)

Germany: investment allowance (IA); investment grant (IG); special depreciation allowance (SDA)

Ireland: Industrial Development Authority (IDA) grant; investment allowance (IA)

Italy: capital grant (CG); national soft loan (NSL)

Luxembourg: capital grant (CG); tax concession (TC)

Netherlands: investment premium (IPR); accelerated depreciation (AD)

United Kingdom: regional development grant (RDG); interest relief grant (IRG)

Source : K. Allen, "Regional incentives in the E.C." Berlin 1978,

Italy there is a substantial relative advantage to be gained from an l.d.r. location (ie. Mezzogiorno); in terms of value added a difference between some 1.0% for a priority (medium-size) location in the South, around 2.3% in a depressed area of the centre-north, and 1.6% elsewhere.<sup>1</sup> In France, spatial differentiation is less marked with only a one percentage

<sup>1</sup> Allen (1978), op.cit. p.152

point difference (in terms of value added) between each of the three award zones. Ireland is an intermediate case with a fairly reasonable degree of preference towards the designated areas - as a proportion of value added the maximum level of subsidy may reach 10% in these areas, 6.9% in the non-designated areas and 5% in Dublin.

At the Community level one finds a degree of net advantage in the order of some 5 percentage points (value added), between peripheral and more central areas. A notable exception here is the South-West of France where the effective subsidy value, even at its maximum, is well below that in some of the more developed central areas.

Table 7 gives a breakdown of the main financial incentives by country for 1974. The figures are taken from a working paper of the European Commission (1976), and concern direct aids only - that is, excluding infrastructure aids, sectoral aids and various minor incentives. Unfortunately they are not comparable with a more up to date set of figures published by the Commission in 1979.<sup>1</sup>

Table 7. Direct regional aids in the EEC countries, 1974										
Type	Belgium	Denmark	Germany (exclud- ing West Berlin)	France	Ireland	Italy	Luxem- bourg	Nether- lands	United King- dom	EEC
Capital subventions	24.9	36.2	65.8	55.1	42.5	22.4	44.0	100.0	63.6	45.8
Interest allowance & aid in loans at reduced rates	63.2	47.8	* <sup>2</sup>	0.4 <sup>5</sup>	5	13.9	2.4	-	5	8.0
Employment premiums & social security concessions	-	6.1	-	-	15.2	51.8	-	-	(30.6)	30.8
Fiscal exemptions	8.5	-	34.2	34.9	(37.7)	11.9	38.6	* <sup>2</sup>	-	12.7
Aid for purchase of industrial land & buildings	1.8	9.9	-	9.6	4.6	-	15.0	-	5.8	2.7
Cost of state guarantees granted for security of loans	1.8	-	-	-	-	-	-	-	-	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Million UA	116.7	8.7 <sup>5</sup>	435.8	124.0	114.2	1,148.8	4.3	21.1	1,037.7	3,015.8
% of GDP	0.28	0.04	0.14 <sup>2</sup>	0.06	2.15	0.96	0.25	0.05	0.68	0.33 <sup>*</sup>

Source: EEC Working paper, 1976. E.C., 1979, "Les regimes d'aide regionale dans la C.E."

\* The GDP of West Berlin is included. <sup>2</sup> Introduced since 1974 (where known)

(-) = subsequently reduced in value or eliminated (where known)

<sup>5</sup> subsequently increased in value (where known). For Denmark the figure for 1977 is some 30m.u.a. (E.C., op.cit. 1979)

Table 7 has been revised as far as possible regarding the incentives on offer. The general tendency has been towards more comprehensive coverage concerning aid-type, although whether this has actually led to any significant increase in overall spending on regional incentives is difficult to tell for the present.

The main incentives would appear to be capital grants, fiscal concessions and 'soft' loans. This last incentive appears to have gained increasing popularity in several countries since the mid-1970's. Labour subsidies, however defined, are really only of major importance in Italy, where as we have seen, the present scheme is due to expire in 1986.

As a proportion of GDP, expenditure on direct regional aids varies considerably from country to country, with the relatively highest shares of spending being undertaken in Ireland, Italy and the U.K.. It should be emphasised however that this difference has not so much to do with the spatial coverage of such aids as with aid intensity — in most countries the population covered by designated development areas was fairly similar at between 27% to 36% of the total. In Belgium and the U.K. the figures were 42% and 45% respectively, and in the Netherlands 17%<sup>1</sup>.

Table 8 gives figures on the number of jobs (created or maintained) associated with direct regional aids for 1974. Expenditure figures from the previous table are also given for comparison, and the member states are placed in descending order of total incentive expenditure.

It should be noted that job creation figures are in all cases associated with capital grants or loans only. This arises from the fact that other incentives tend to supplement the basic regional grant leaving the job creation

---

<sup>1</sup> Figures for 1978, Yuill, Allen and Hull (1980), p.216.

Table 8      Direct regional aids and associated employment, 1974.

<u>Country :</u>	<u>Expenditure, million U.A.</u>	<u>New employment</u>
Italy	1,148.8 <sup>d</sup>	69,600 <sup>b</sup>
U.K.	1,037.7	15,600 <sup>a</sup>
w.Germany	435.8	105,502 (new) 148,175 (maintained) <sup>b</sup>
France	124.0	43,128 <sup>b</sup>
Belgium	116.7	23,525
Ireland	114.2	16,333 <sup>b</sup>
Netherlands	21.1	approx 6,500 <sup>c</sup>
Denmark	8.7	n.av.
Luxembourg	4.3	200-300
<hr/>		<hr/>
	= 3,015.8 m.u.a.	= 280,500 approx.
<hr/>		<hr/>

Source : see table 7. For Ireland see, IDA Annual Rep.1977

a) including jobs maintained - figures for "selective financial assistance" (loans) only.

b) capital grants only. c) annual average over period 1967-77.

d) this figure includes interest rebates on loans made in the centre/north, whilst the employment figures relate to the South only. The difference involved is probably around 50 m.u.a.

Note : Whilst expenditure figures relate to actual spending in the given year, the employment figures relate to expected employment resulting from awards made in that year.

---

figures essentially unchanged. Where fiscal concessions operate with a somewhat broader spatial coverage, (eg. France, Italy) there are unfortunately no figures available on associated employment creation.



The above points are important when comparing incentive cost and job creation. For example, around one half of total expenditure in Italy went towards social security concessions, and in the U.K. around 40% (early 1970's) went towards the Regional Employment Premium. Whereas the former scheme covered additional employment units only, the U.K. subsidy covered all employment units in manufacturing industry, and as such constituted an operating aid not linked to new employment creation. Whilst the U.K. employment figures in table 8 are in any case substantially underrepresented (see footnote), the Italian figures are probably low to the extent that no specific account is taken of new employment directly attributable to the social security concession.

A more general consideration, and one we have already pointed to in a number of instances concerns the difference between declared job creation and realised new employment. The degree to which grant payment is linked to job realisation varies somewhat from case to case, and some countries are stricter than others in controlling the extent to which job targets are actually met. As a result, actual job creation, as we have noted in several cases, often tends to be below declared job targets. The exact extent of this difference is not known in many cases, but as we have seen for Ireland, such discrepancies may well be considerable -- with the general effect of raising aid cost per job created.

Finally, the term 'job creation' is in itself somewhat misleading. Quite clearly a certain proportion of aided projects could be expected to proceed anyway, although perhaps in a somewhat reduced form. In other cases regional aids may influence location rather than the actual decision of whether to invest or not. On the other hand regional employment creation may be higher

to the extent that inter-industry linkages create demand for locally produced inputs, and to the extent that the initial increase in regional income is enhanced through the multiplier effect.

In a fundamental sense the employment impact of regional aids will depend on whether or not they are considered as 'windfall' gains and, conversely, to what extent they enter into the firm's location and investment decision making. We shall now turn to consider this aspect in more detail. The following chapter will take up the problem of determining the actual level of employment creation directly attributable to regional incentives.

#### 8.5. Summary : some preliminary considerations on the effectiveness of the various instruments.

Before making any detailed comments about specific instruments to which we shall proceed shortly, it is worthwhile to provide some background to the economics of investment and employment subsidies.

In the first place we should make clear the distinction between non-spatially differentiated national subsidies, and those which have a clear element of net regional preference. Essentially, for national subsidies there are two effects to consider — firstly, the 'income' effect on profit-maximising output, investment and employment, and secondly, the 'substitution' or relative price effect on the optimal capital/labour ratio.

At the regional level there is a third factor to consider; the displacement effect, or the extent to which investment that would have taken place elsewhere is diverted to a favoured location.

Investment subsidies.

Much confusion has arisen in the past concerning the possible labour displacement effects of investment subsidies, and is generally the result of viewing such incentives solely in terms of relative factor prices.

However, whilst an investment subsidy will certainly affect relative factor prices for (additional<sup>1</sup>) investment and therefore to some extent the resulting capital/labour ratio<sup>2</sup>, the final outcome in terms of employment will clearly also depend on the 'income' effect, or the extent to which output is higher than would otherwise have been the case.

As one author has remarked : " the essence of a subsidy to investment is not primarily to induce substitution along a given production frontier, but to make profitable projects that were previously just below the margin of profitability." <sup>3</sup>

Conventional analysis of this subject typically assumes that investment subsidies cover all investment units and not just marginal ones (eg.Thirlwall,op.cit.). As a result the final outcome, that is whether more or less labour is hired, will clearly depend on the relative strengths of the 'substitution' and 'income' effects, and, ex ante, there is no way of telling whether more or less labour will be employed. The essential difference between the two approaches arises due to the fact that whereas a subsidy on additional investment may leave

---

<sup>1</sup> This is a distinction we make throughout the following analysis, unless otherwise stated. In other words, all aids are assumed to apply to new investment only (inc.extensions) rather than straight replacement investment.

<sup>2</sup> It is worth noting that this will occur only in the case where alternative techniques are available.

<sup>3</sup> Thirlwall, (H.M.S.O. 1976), p.100.

the initial structure intact,<sup>1</sup> a subsidy covering replacement investment may well affect the existing productive structure with indeterminate effects on the initial level of employment.

Taking account of the abovementioned considerations, we may note that a regionally differentiated investment subsidy may result in an increase in the level of regional employment ;

- i) to the extent that otherwise non-profitable projects which would not have gone ahead are implemented,
- ii) to the extent that profitable projects which would have gone ahead anyway are not induced to employ a lower level of additional labour than would otherwise have been the case.
- iii) to the extent that (profitable) projects which would otherwise have located elsewhere are induced to move to the designated development areas.

Conversely, an investment subsidy will result in a lower level of new regional employment ;

- i) to the extent that profitable projects which would have gone ahead anyway or would have located in a development region, are induced to employ a lower level of additional labour due to the substitution of capital for labour (net of any 'income' effects) in the final production process.

The (net) employment effect of a regional investment subsidy will, at a national level, depend on the final outcome of the respective 'income' and 'substitution' effects, which will in turn be positively affected to the extent that new projects are induced (domestic or foreign) or planned projects are expanded.

---

<sup>1</sup> In fact, there may be two opposite and indirect effects on the level of existing output and employment. In the first place, where new investment is complementary there may be positive effects on the level of existing capacity utilisation. Secondly, where new activities in some sense substitute for existing production or inputs there may be a negative or displacement effect on existing capacity.

A final point which should be emphasised at this stage is that, at a regional level, the more important employment effects should be expected to arise more from the diversion of 'profitable' projects from elsewhere, than from the encouragement of otherwise non-profitable ventures.<sup>1</sup> To achieve this it is clear that regional subsidies should be made as spatially selective as possible; if the intention is to attract profitable projects to l.d.r.'s, then there is little point in subsidising projects which would have located in an l.d.r. anyway, or diverting profitable projects from one development area to another. Clearly, the likelihood of either of these outcomes will increase as the proportion of designated development area becomes larger. At the limit, a policy which subsidises everyone everywhere will have little influence over industrial location.

#### Regional factor subsidies and market structure.

Whether or not market structure may influence the operation and effectiveness of a factor subsidy is a question we shall now turn to consider. Specifically, there may be good reasons to believe that the net effect on output will in general be greater under competitive conditions than under monopoly. The intuitive interpretation is that whilst under monopoly, price and marginal revenue decline as output increases, under competitive conditions price and marginal revenue can be assumed to be invariable given that the increase in output is small in relation to total market demand. The outcome is illustrated graphically below.

---

<sup>1</sup> 'Non-profitability' as such is, of course a very complex concept to define ex ante. In the first place as mentioned previously, it may result from relative locational disadvantage of one kind or another. In the second place, profitability may also depend on the investment decisions of other firms; as such the decision of one firm to invest in a l.d.r. may improve the profitability of other projects in the same area ('capacity' effect).

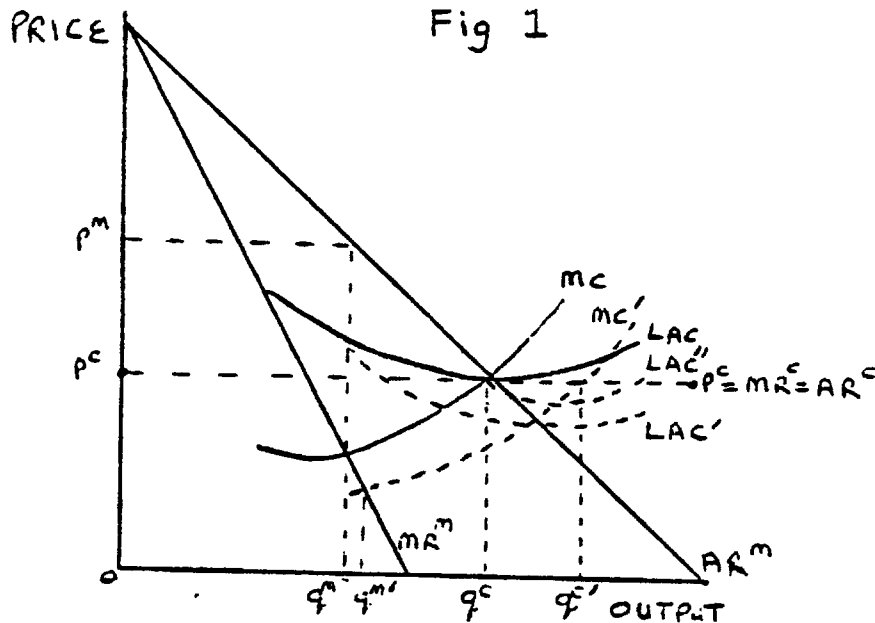


Figure 1 presents the long-run cost and revenue functions facing two firms, one a monopolist and the other under competitive market conditions.

The average-cost curves are long-run in the sense that both capital and labour are assumed to be flexible, and higher levels of output may be achieved using the optimum combination of both inputs.

For the purposes of analysis, all costs are assumed to be variable costs and the factor subsidy is assumed to represent a fixed proportion of marginal costs<sup>1</sup>. Neither of these assumptions appears to be particularly unrealistic given the long run nature of the analysis and the character of the aids to regional development in question.

<sup>1</sup> That is i) where factor costs remain unchanged; a fixed subsidy per factor unit employed, and ii) where factor costs rise with output; a factor subsidy proportional to unit factor costs.

The effect of this type of aid is to move the marginal cost curve, MC, downwards to the extent depicted by MC' in fig 1. The new (subsidised) level of marginal cost is only available however for additional capacity; which, for the monopolist involves all levels of output above  $q^m$ , and for the competitive firm all levels of output above  $q^c$  — these being the initial profit maximising positions under the respective market conditions.

Given the above observations it is clear that average cost will decline only for additional levels of output; that is, to LAC' for the monopolist and LAC" for the competitive firm.

The new profit maximising levels of output become  $q^{m'}$  for the monopolist, and, under the assumption that price in the competitive market remains unchanged (at  $p^c$ ),  $q^{c'}$  for the competitive firm.

In figure 1. this results in a higher absolute and proportional increase in output for the competitive firm. It also results in super normal profits being achieved at the post-subsidy level of output  $q^{c'}$ .

The reader who is not yet convinced of the certainty of this result is invited to consider the situation where  $AR^m$  represents the marginal rather than the average revenue curve facing the monopolist<sup>1</sup>. In this case it can be seen that the post-subsidy level of monopoly output would lie midway between  $q^c$  and  $q^{c'}$ . However, the cost of the subsidy (being proportional to marginal costs) would come to somewhat less than one half of the subsidy paid to the competitive firm, due to the fact that marginal costs are rising over the levels of output considered.

---

<sup>1</sup> In this case MC intersects with  $MR^m$  at the level of output  $q^c$ .

In the case of the competitive firm it should finally be noted that the availability of a subsidy which operates at the margin is of major interest only where the firm was previously earning normal or super-normal profits. Where the firm was originally making a loss, it is unlikely that a subsidy on additional capacity would lower LAC sufficiently for the firm to at least 'break even'. An operating subsidy on all units of output would be much more likely to have this effect - that is, to prop up enterprises which would otherwise have no long-term viability.

Figure 2. presents a similar analysis for a typical firm under oligopoly. Under oligopolistic market conditions the reactions of other large firms producing similar products, to changes in price and output must also be taken into account.

The general assumption in the "kinked demand curve" model (fig.2) is that whilst competitors will generally follow a price cut, they will tend not to follow a price increase.<sup>1</sup> This situation results in a discontinuity in the marginal revenue curve facing the producer (aaD) such that relatively small shifts in the long-run marginal cost curve (MC to MC') are unlikely to result in the firm changing either price or output.

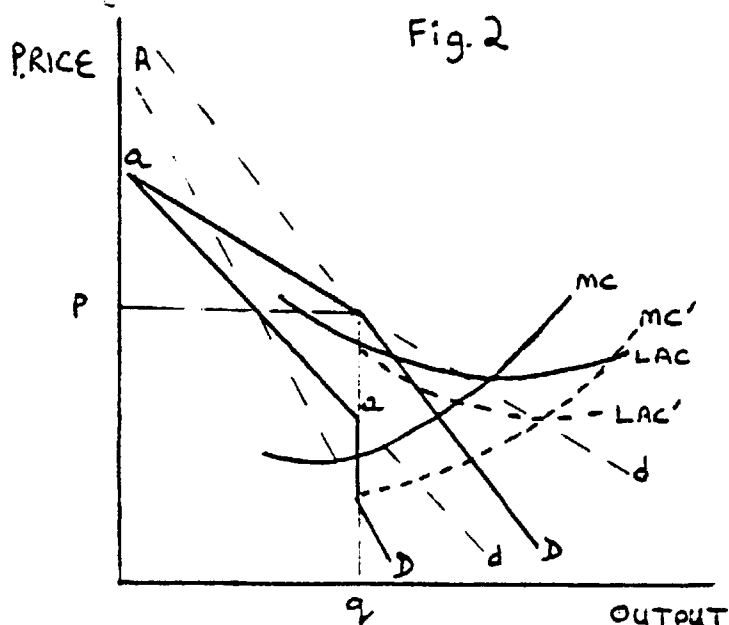
The main conclusion to be drawn from the above analysis is that market structure is indeed an important element to be considered when assessing the potential output (and employment) effects of industrial and regional subsidies.

---

<sup>1</sup> The argument being that where one of a small group of firms raises its price, other firms will be content to allow their volume of sales to subsequently increase without adjusting price.



Fig. 2



Note : After Laidler (1974).  $d_{ad}$  represents the demand curve facing the oligopolist where other firms do not react to a change in price or output of the firm in question.  $DAD$  represents the demand curve where other firms are expected to adjust prices in the same direction. The availability of a factor subsidy does not affect equilibrium output  $q$ , or price  $p$ .

In particular, the analysis lends support to the general case (see introduction) for making subsidies in principle conditional upon net addition to capacity. Subsidies to operating costs, whilst increasing profitability, do virtually nothing that could not be achieved by subsidies which operate at the margin.

In order to avoid the possibility of capital / labour substitution, it may be further desirable to link the subsidy in some way to net additions to the workforce. An example here is the new regional development grant in France with a value of up to FFr. 50,000 per new job created, restricted to a ceiling of 25% of investment costs.

Labour subsidies.

When used, labour subsidies in the European Community are, for reasons already mentioned, applicable only to additional units hired. It is nevertheless worthwhile to spend a few words at this point on considering the logic behind 'blanket' labour subsidies such as the Regional Employment Premium in the U.K.. Such considerations are not without interest given the great claims which were made at the outset and the expectation that R.E.P. would operate in an equivalent manner to a regional 'devaluation'.

In the first place, reference to our previous discussion would bring us to conclude that insofar as it constituted an operating aid, R.E.P. may have had just as much effect in propping up unprofitable firms as in encouraging profitable expansion of output. As such it is perhaps not surprising that its eventual withdrawal caused much complaint from firms which had been in receipt of it for some years.

Secondly, the assumed equivalence of a regional devaluation and perpetual wage subsidy is itself open to question<sup>1</sup>, as is the somewhat more fundamental assertion that a wage subsidy, by increasing the level of exports may serve to raise regional growth rates. On the latter point, even if we admit that a wage subsidy may permanently lower regional export prices and hence raise the absolute level of exports, this is by no means a sufficient condition for the regional growth rate to be raised permanently.<sup>2</sup>

---

<sup>1</sup> In the first place, because a devaluation also imposes the penalty of higher import prices, and hence provides an added incentive to improve efficiency in the import-competing sector. In the second place due to the fact that when a wage subsidy is mainly or largely used to increase profits, the expansionary effect on output and employment is correspondingly reduced (see annex ch3).

<sup>2</sup> Specifically, it would require either, the rate of growth of exports to be some function of the level of export prices, or regional growth to be some function of the absolute level of exports — neither of which assumptions has any theoretical base. See Thirlwall (HMSO, 1976), p.103, and annex to growth model derived earlier.

A third set of considerations concerns the actual effectiveness of the R.E.P. in question. In the first instance, as Kaldor (1970) pointed out, the level of subvention would have to be very substantial in order to improve the competitive position of the depressed areas; a 6% reduction in labour costs would allow only about a 2% reduction in the level of regional export prices, given that a large proportion of the total cost of regional output consists of value added by firms located in other regions.

In the second place, from what can be gathered on the actual use to which R.E.P. was put, industrial enquiry results suggest<sup>1</sup> that around 40% went towards higher profits, 50% towards lowering prices and sales promotion, and 10% towards higher wages. Over one half of firms questioned stated that R.E.P. had resulted in their undertaking more investment in development area plants than would otherwise have been the case. At the limit however, it is of course possible that a labour subsidy on existing productive capacity may result in the greater part of additional investment (arising from higher profits) being located in new or existing plants elsewhere (Holland 1976). In the third place, the observed employment impact of R.E.P. has not been convincing. At the outset one of the main objectives of the policy (apart from attracting labour intensive activities to the problem regions) was to improve competitiveness in local enterprises, and help prevent closures and redundancies in traditional sectors (eg. textiles) by giving these firms time to adjust to changing market conditions and production techniques.

However, from what can be gathered from the results of various studies covering the period 1967 (when R.E.P. was introduced) until 1971, the impact on new employment creation has been extremely limited.

---

<sup>1</sup> Moore and Rhodes (HMSO 1976) p.213. Out of some 300 development area firms approached, only around one third (mostly the larger ones) had made a "formal and conscious decision as to how R.E.P. was to be used" (ibid.). For the sample of firms as a whole, R.E.P. receipts were found to be as high as the equivalent of 21% of pre-tax profits (ibid.).

In particular, the survey sample mentioned earlier revealed that 39% of firms (119 out of 291 replies) questioned felt that employment had not been affected in any way by R.E.P. Only 56 firms (representing however 27% of sample employment) stated that closures/redundancies had been avoided due to the R.E.P. , with job saving representing some 13% of total employment in these firms (op.cit.p.214/5).

The above survey results must however be seen in the light of more recent studies covering the same period (1967-71). MacKay and Thomson (1979) for example, found little evidence after allowing for the influence of firm movement<sup>1</sup> and industrial structure, of improved indigenous firm performance in the five years after the introduction of R.E.P.. Moreover, a disaggregated analysis of their results shows that in two of the assisted areas which experienced signs of improvement, less than one half of local manufacturing firms received R.E.P., whilst in three out of four regions where R.E.P. was paid to nearly all firms indigenous firm performance declined.<sup>2</sup>

A final argument in support of labour subsidies is that they may "redress the possible labour-saving bias in factor proportions introduced by capital subsidies".<sup>3</sup> The argument that a subsidy to wage costs will lead to the use of more labour intensive techniques is however dependent on the assumption that there exists plenty of room for variation in the production process and a high elasticity of substitution between labour and capital. Where lack of alternative technologies places limitations on the available choice of factor mix, small reductions in the price of labour are unlikely to result in changes in the capital-labour ratio. Support for this view is given by the findings of one

---

<sup>1</sup> That is, new firms which established in these areas from 1960 onwards.

<sup>2</sup> MacKay and Thomson (1979), p.252. These findings would seem to contradict the results of a similar and earlier study (where firm movement was not separately considered), which suggested that R.E.P. may have been responsible for some 20,000 additional jobs in the D.A.'s from 1968-71; Moore and Rhodes, E.J. vol 83, 1973'. Whilst R.E.P. may well have had some effect in diverting firms to the problem regions, it is however significant that the major share of expenditure on R.E.P. went to firms already operating in these areas (Ashcroft, 1978).

<sup>3</sup> Thirlwall, (HMSO, 1976).

report<sup>1</sup> which drew attention to the fact that no evidence could be found to suggest that R.E.P. had led to labour/capital substitution on any significant scale. Similarly, the argument that the simultaneous use of labour subsidies is necessary to compensate for the capital 'bias' of investment subsidies, found little support insofar as evidence did not show that the latter had induced firms to employ more capital intensive techniques than might otherwise have been the case (ibid.).

Whilst the above analysis has largely centred around the Regional Employment Premium which applied to all and not just additional labour units, there is unfortunately little to be gained from further consideration of marginal labour subsidies. In particular, the latter may raise additional problems of inequity for firms which do not receive it<sup>2</sup>; the main point being that whilst capital grants, loan finance etc. are potentially available to all eligible firms wishing to expand, a marginal labour subsidy (which becomes the equivalent of a 'blanket' subsidy for new firms) gives a 'competitive' edge over existing firms which, at the limit, short of making workers redundant to take on others, will not be able to compete on equal terms.<sup>3</sup>

In conclusion it can be said that the cost of R.E.P. — amounting to up to 41% of total expenditure on regional incentives — would appear particularly high in view of its somewhat limited impact on new employment creation. Whilst the R.E.P. was probably useful in terms of reducing or postponing closures/redundancies in labour intensive 'traditional' sectors, it should be asked whether a short-term sectoral strategy (eg. textiles) would not have been more cost-effective in this respect.

---

<sup>1</sup> Moore and Rhodes (HMSO, 1976), p. 218.

<sup>2</sup> ibid. They do not however go on to point out the precise nature of the problems involved, which in the view of the present author are such as to prompt severe doubts regarding their desirability at any level.

<sup>3</sup> eg Italy. In the Italian case, however, these effects were perhaps minimal insofar as many smaller scale enterprises effectively avoided such contributions in the first place. In more modern sectors there would anyway have been few direct competitors in the local market (see Part 3).

### Selectivity and industrial subsidies

A few words should finally be said about whether industry specific (or variable rate) subsidies are likely to be more effective in promoting regional development than non-selective subsidies. Two separate considerations relating to demand and supply aspects are worth noting.

Firstly, in the sense that a shift towards production of goods with high growth prospects and a high income elasticity of demand is essential to improve a lagging region's growth rate<sup>1</sup> it may clearly be desirable to single out such industries for particular encouragement.<sup>2</sup>

Secondly, in order to improve secondary linkage effects on local supplier firms, it may further be desirable to single out activities which, for particular regions would be likely to have especially favourable matrix multipliers. One obvious advantage would be that of avoiding the situation where firms may be attracted to certain regions by high levels of subsidy at the expense of other problem regions where surplus capacity may exist in relevant supplier industries.

In general, the main practical difficulty with this approach is that whilst input-output analysis may tell us something about the location of industrial inputs on average, at the margin and for new firms such results can only be considered a rough guideline. In particular, as we saw in Chapters 5 and 6, industrial linkage patterns are often determined by firm structure and the functional position of a production unit within the corporate whole. The importance of ensuring that new firms in depressed areas do not create more direct and indirect activity elsewhere, has however led one author (Thirlwall, 1976), to suggest that subsidies should be offered on the condition that the industries concerned bought a certain proportion of their inputs from specific regional suppliers.

---

<sup>1</sup> See growth model outlined earlier and introduction to this chapter.

<sup>2</sup> Not solely in terms of financial incentives; external economies such as the availability of research facilities or skilled labour force may be equally important.

### Some concluding remarks on the various incentives.

In this section we shall conclude by outlining some of the advantages and disadvantages of the major regional incentives to be found in the countries considered.

#### Investment grants

As we have seen, these tend to be the single most important regional incentive in most E.C. countries.

A grant system has the advantage of being simple to operate, easily differentiable at sectoral or spatial level and transparent at the level of the receiving firm.

A substantial element of discrimination can be achieved with investment grants; in the first place they may be item related to cover only directly productive investment expenditure; in the second place they may be made available only for truly 'mobile' production processes (eg. France) to encourage firm movement, or may be directed towards industries using natural resources (eg. Italy) to encourage local processing.

Nevertheless problems may arise particularly where such assistance is largely automatic in character insofar as grants may be given to firms which would anyway have located in a development region<sup>1</sup>.

An even greater problem however is that quite substantial levels of assistance may be given to projects which create very few jobs, and, as we have seen minimum job requirements vary considerably from country to country. Whilst this problem can to some extent be avoided by setting alternative ceilings on aid per job created, there is the additional question of whether and to what degree awards should be phased to coincide with job creation targets. Since many firms clearly exaggerate potential job creation figures when applying for an award, there is obviously a case for linking aid payment to actual job creation or making stated targets legally binding (ie. subject to repayment). In this respect, whilst the French system (up to 1982) was probably too strict (max. 3yr time-lag allowed), the Irish system, as we have noted appears to have attached too little

---

<sup>1</sup> cf. Klassen(1980), vis. West Central Scotland Plan.

importance to this problem (only around 60% of job creation is expected within 5yrs.).

Certainly some distinction needs to be made between new-start and extension projects<sup>1</sup>; from a study of the employment build-up in over 200 newly established factories in the U.K. Northern region between 1946-70 (MOORE & RHODES, 1976), it was found that nearly three-quarters of eventual employment could be expected within three years, building up to a 'mature' workforce after a total of some eight years. In the case of extension projects employment build-up was generally much faster.

### 'Soft' loans

There is an obvious and close relationship between investment grants and preferential loans. The grant equivalent of soft loans is simple to estimate and in some countries loans are offered as an alternative to grants.

Awards are generally administered through public or private credit institutions, and this may have two advantages; firstly, the award will typically be subject to the normal evaluation procedures of the institutions concerned; secondly, accessibility is generally good and request procedures are fairly simple.

These factors may be particularly important for small-scale projects where access to private credit with the minimum of administrative delay may be of overriding importance. Whereas capital grants are paid when the investment is completed, or in stages, soft loan systems have the obvious advantage of improving access to investment finance at the time it is needed.

In addition, soft loans may be made flexible and discriminatory as in the case of grants by means of, variable interest rate concessions, interest or repayment-free periods, or variable loan duration.

Problems may however arise in controlling and coordinating award and payment through intermediary agencies, and

---

<sup>1</sup> Lack of distinction between new and extension projects in the (old) French system, may have been responsible for the disproportionate share of extension projects in the total of aided investment (see Ch.9).



there is a clear dichotomy of interests between at the same time making financial assistance as selective and discretionary as possible, and maintaining a fair degree of decentralisation and simplicity in the process of loan application and award.

### Fiscal concessions

In general, tax concessions (eg. accelerated depreciation allowances, profit-tax concessions), insofar as they relate to profits have the advantage of inspiring efficiency. Moreover since the level of aid is directly related to a firm's viability, waste of public funds is avoided.

However in practice there may be a number of drawbacks. In the first place such awards are not investment specific and do not operate at the margin, and in practice eligible profits may arise just as easily from the exploitation of a monopoly position as from the extension of capacity or improvement in efficiency. Secondly, where firm mobility is low such concessions may take on the form of a 'windfall' gain to firms already operating in the designated regions rather than a direct inducement for profitable projects to locate in such areas. This is however a more general problem with all non-marginal subsidies.

Thirdly, tax concessions do not provide quick liquidity advantages in the way of soft-loans or capital grants; moreover it may be some years before a new plant becomes fully operational and profits first arise.

Fourthly, whilst tax concessions may well be useful in increasing the effective value of other incentives (insofar as these give rise to higher taxable profits), on the other hand the net advantage afforded by such concessions may be substantially reduced by either national tax concessions or accelerated depreciation allowances. The latter case is quite interesting as an example of the UK tax system shows; in the UK 100% first year allowances are generally available for many types of capital investment, and companies may effectively set the full cost of plant and equipment against profits earned in the year they were

bought - thus achieving a very substantial reduction in the cost of an investment (that is for companies which are actually liable to pay tax). Although tax relief may be rolled forward, many companies may find themselves in the position of having to wait some considerable time before taxable profits rise to a level where a claim can be made. It is consequently not too difficult to imagine a situation where new companies in development areas - even profitable ones - find that the financial advantage conferred by regional investment grants is less than the fiscal advantage obtained by comparable but established firms elsewhere.

Finally, certain administrative and technical problems may arise in identifying and attributing eligible profits, especially in the case of multi-plant companies. One practical suggestion to overcome this difficulty, has been that a firm's profits should be attributed to its constituent plants in proportion to their share of total employment.<sup>1</sup> This would have the effect of making profits-tax concessions non-factor-neutral (ie. positive labour bias) for companies with plants located outside designated development areas<sup>2</sup>.

However even this solution leaves a lot to be desired, particularly in the case of M.N.E.'s operating in several European countries. Here, the ability to practice transfer pricing between subsidiaries (see Ch.7) and offload sizeable profits onto plants where profits-tax concessions are available, is clearly one potential means of bypassing national tax liabilities where these are highest - at the 'cost' of the less developed areas which forego revenue which might otherwise have been obtained through these activities. At the limit, it could be argued that, in this way, tax concessions at the periphery would serve just as much to maintain plants in more central locations, as to shift production processes to the less developed areas.

### Labour subsidies

Many of the problems associated with labour subsidies have already been spelt out and will not be repeated here. Moreover, such subsidies are becoming increasingly rare (at the

---

<sup>1</sup> Klassen (1980), p.328

<sup>2</sup> *ibid.*

regional level) following the abolition of the Regional Employment Premium in the U.K.. In Italy, the concession on social security contributions is due to expire in 1986. Doubtless the very great expense involved with both of these subsidies must have been a deciding factor in their abolition/discontinuation. Some further observations on labour subsidies will be made in the chapter which follows.

### Conclusions

Whilst there are obvious problems involved in drawing conclusions regarding countries employing somewhat different approaches to the implementation of regional policy, a number of important observations can nevertheless be singled out.

1. A general tendency towards a more dispersed development approach is detectable in all three countries considered, and would appear to be largely explainable in terms of:
  - (i) slow or negligible 'spread' effect of regional growth centres or 'poles' on their surrounding areas, probably compounded by,
  - (ii) the politically motivated desire not to be seen to favour certain depressed areas at the 'expense' of other, often more isolated areas.
  - (iii) changes in the structure of employment growth, now mainly observable in the service sector and tending to favour larger agglomerations over more sparsely populated areas.

2. Increasing recognition of the need to develop suitable policies to promote indigenous (small) firm expansion. In the past general aid schemes have often proved too inflexible (eg. vis minimum job or investment requirements) and insufficiently comprehensive with respect to the needs of smaller firms. Doubtless one explanation for this trend lies in recognition of the fact that under present economic conditions it is no longer realistic to rely solely on firm movement to improve industrial structure in the development areas, and that the main impetus to growth

and adjustment now lies primarily with the indigenous firm sector.

3. Whilst the service sector now appears a much stronger candidate for incorporation into regional incentive schemes, in no country have such schemes achieved any substantial degree of success. Very often this occurs because regional aid schemes, which are primarily capital oriented, have little direct relevance to the service sector. Where 'tailor made' schemes exist, as in France, and are related to job creation, transfer and setting up costs, the low level of take-up suggests the existence of strong barriers to service sector mobility. In the French case, this has led to renewed efforts to control tertiary expansion in Paris and promote decentralisation.

4. Concerning regional incentives, we have drawn attention to the problem of controlling grant payment and job creation. Failure to make serious effort in this sphere is likely to lead to increasing, and justified, criticism that the cost of regional policy is proving to be out of all proportion to the number of jobs actually created.

5. We have also shown that to obtain maximum effect with minimal competitive distortion, factor subsidies should preferably operate at the margin and be as spatially selective as possible. Under given circumstances sectoral discrimination may also be desirable.

6. Following from the above comments we may wish to make the analytical distinction between aids which are designed to encourage firm movement/relocation to development areas, and aids which are primarily aimed at improving the development potential of indigenous firms. Specifically, whilst the former target may call for a sectoral approach such as variable rate capital grants favouring high growth industries with strong regional linkages, the latter may require a somewhat broader range of instruments to help firms develop and improve products and production processes, and to eliminate general bottlenecks to small firm development (see also Part 3).

## Bibliography

- SHONFIELD, A. (1965), Modern Capitalism, O.U.P./R.I.I.A.
- YUILL D., ALLEN K., HULL C. (1980), Regional Policy in the European Community, Croom Helm/C.S.P.P.
- PODBIELSKI G. (1978), 25 years of special action for the development of Southern Italy, S.V.I.M.E.Z./Giuffrè.
- YANNOPOULOS & DUNNING (1976), "Multinational enterprises and regional development-an exploratory paper", Regional Studies, vol.10, pp.389-399.
- VANHOVE, N. & KLASSEN, L. (1980), Regional Policy - A European Approach, Saxon House.
- ALLEN K. (1979), Balanced National Growth, Lexington.
- PRUD'HOMME R. (1974), "Regional Economic Policy in France", in Hansen (ed.), Public Policy and Regional Economic Development, Ballinger.
- ALLEN & MACLENNAN (1970), Regional Problems and Policies in Italy and France, London.
- ANDOUIN J. (1977), La France Culbutée, Paris, Moreau.
- BULL G. (1978), "An assessment of Italian post-war regional policy", M.A. thesis (unpublished), University of Exeter.
- RONZANI S. (1979), "Regional incentives in Italy", in K. Allen (1979).
- THIRLWALL A. (1976), "Comments on paper by C. Blake, 'Some economics of investment grants and allowances'", in A. Whiting (ed.), The Economics of Industrial Subsidies, H.M.S.O..
- LAIDLER (1974), Introduction to Microeconomics, Oxford, Allan.
- KALDOR N. (1970), "The case for regional policies", SJPE, 17, pp.337-47.
- MOORE & RHODES (1976), "A quantitative analysis of the effects of the R.E.P. and other regional policy instruments", in A. Whiting, op.cit. HMSO.
- MACKAY & THOMSON (1979), "Important trends in regional policy and regional employment", S.J.P.E., Nov. 1979, pp.233-60.
- ASHCROFT B. (1978), "The evaluation of regional economic policy - the case of the U.K.", U. of Strathclyde, Studies N°12.
- GRAZIANI A. & PUGLIESE E. (1979), Investimenti e Disoccupazione nel Mezzogiorno, Bologna, Mulino.



## CHAPTER NINE

---

### A QUANTITATIVE ANALYSIS OF THE EMPLOYMENT IMPACT OF REGIONAL POLICIES IN FRANCE AND ITALY (WITH REFERENCE TO THE U.K.).

---

#### CONTENTS :

9.1.1	An introduction to the analysis	p. 398
1.2	France :	P. 401
1.3	Broad trends in regional industrial employment	p. 402
1.4	The regional distribution of growth in manufacturing employment, 1967-74	p. 405
1.5	The Development Areas	p. 408
1.6	The results of the shift-share analysis	P. 411
1.7	Some further comments on the residual components	p. 419
1.8	The employment impact of regional policy 1967-74	p. 422
8.1.	An econometric model of regional employment changes	p. 425
8.2.	The regression results	P. 431
8.3.	The impact of regional policy by region	P. 433
1.9	Summary	P. 436
1.10	A comparison of French and British experiences	p. 439
1.11	The post-1974 period	P. 441
1.12	Concluding comments on France	P. 442
9.2.1	A comparison with Italian regional policy	P. 443
2.2	The impact of regional policy by region - an approximation	p. 444
9.3.	The role of the state and state-controlled enterprise in regional development	p. 452
9.4.	Summary and conclusions - a comparison of the cost of regional policy in France, Italy and the U.K..	p. 455
ANNEX 1	Some further comments on the shift-share technique	p. 460
ANNEX 2	The Exchequer and resource costs of regional policy - some considerations	P. 461
BIBLIOGRAPHY	p. 464.	





## Chapter 9

### 1.1.

#### Introduction to the analysis

Whilst Chapter 8 gave detailed information on the number of jobs aided by regional incentives, there is clearly an important conceptual distinction to be made between the number of jobs aided and actual job 'creation' - that is, the number of new jobs or jobs maintained which are directly attributable to regional incentives of one type or another.

Clearly, to arrive at such figures we must of necessity make certain assumptions as to what would have happened in the absence of regional policy. In the following studies this is achieved by evaluating regional (industrial) performance after having allowed for the employment effects attributable to industrial structure.

The technique adopted for this purpose involves the estimation of an 'expected' employment growth series for each employment sector in each region - which quite simply describes the employment growth which could be expected over a given period if each of the regional industrial sectors grew at a rate similar to that for the nation as a whole. Subtracting this set of figures from actual employment changes over the same period gives us a view of regional employment performance in which the effects of industrial structure have been largely eliminated<sup>1</sup>. This residual or 'growth' component is generally taken to reflect location specific advantages/disadvantages in the widest sense.

---

<sup>1</sup> See annex 1.

The expected growth of employment (absolute figures), is given by the following relation :

$$g_i^{ex} = \sum_1 \left[ \frac{N_{t+1}^i - N_t^i}{N_t^i} \cdot n_t^i \right]$$

where,  $N_t^i$  = total employment in industry i,  
 $n_t^i$  = employment in industry i in region r,  
t and t+1 refer to 1967 and 1974.

The residual effect is simply the actual growth of employment less the expected growth, i.e. ,

$$g_i^{res} = \bar{g}_i - g_i^{ex} \\ \text{or, } \sum_1 [n_{t+1}^i - n_t^i] - \sum_1 \left[ \frac{N_{t+1}^i - N_t^i}{N_t^i} \cdot n_t^i \right]$$

Expressed as growth rates, the structural and residual components become :

$$g_i^{ex} = \bar{g}_i^{ex} / \sum_1 n_t^i \cdot 100, \text{ and, } g_i^{res} = \bar{g}_i^{res} / \sum_1 n_t^i \cdot 100$$

Clearly, (i) the national growth in employment is equal to the sum of the structural components, and, (ii) the sum of the residual components for all r is zero.

Whilst regional financial incentives may be expected to play an important role in improving regional economic performance, there may in practice be a number of other factors involved - the level and quality of basic infrastructure, wage costs and productivity, transport costs, external economies and natural resource endowment, to name but a few. Basically there are two alternative methods for separating out such effects; the first method involves distinguishing between 'policy-off' and 'policy-on' periods, and extrapolating the residual trend from the former period into the latter. This approach however, assumes that non policy related locational factors are of equal 'strength' in both periods, and the validity of such an assumption clearly becomes more questionable as the number of years covered in the two periods becomes longer.

The second possible method is to subject the residual components themselves to econometric testing, taking account of other factors which may have affected location specific advantage. This is in fact the approach adopted in the present study and for two main reasons ; in the first place it is often very difficult to make a clear distinction between 'policy-off' and 'policy-on' periods; in the second place, it is clearly desirable to know something about the relative importance of other locational factors, which may in turn have significant policy implications.

Finally, although every precaution has been taken to avoid them, it is perhaps just as well to bear in mind some of the criticisms and practical limitations of the so-called 'shift-share' employment analysis.

In the first place the technique may fail to take account of the multiplier effects on other sectors not included in the analysis. One method often used to achieve such estimates is to multiply the residual component by some estimate of the regional multiplier (from input-output analysis) to obtain the direct and indirect effects respectively.

In the second place, the validity of the results is

clearly dependent on the level of industrial disaggregation used and the degree of similarity within industrial groupings from one region to another. Important regional differences may for example appear between product ranges within any particular sector (eg. transport equipment - automobiles and components), or between firm-size distributions (although this is only important if there are important functional differences at this level, (see Chs. 5&9 vis Italy)).

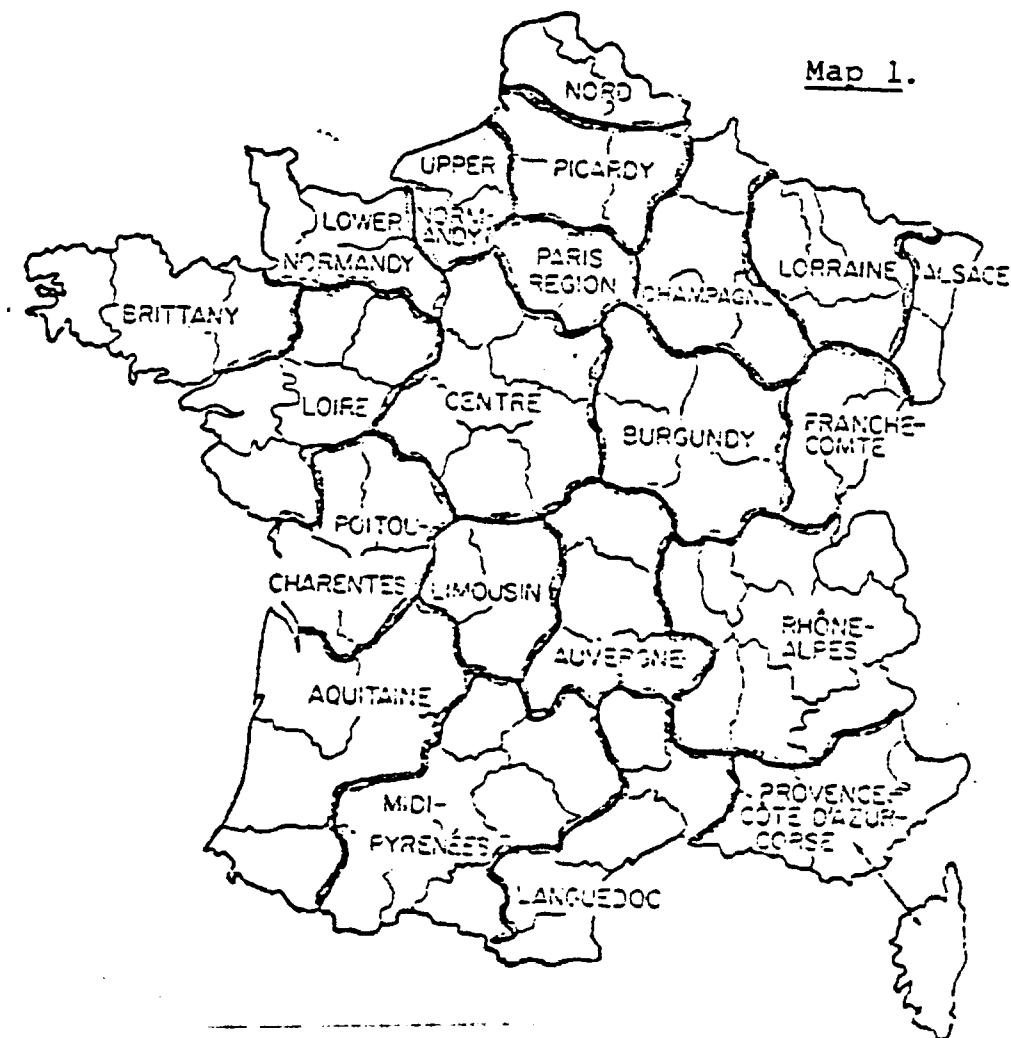
Similar considerations may be made with respect to the time period covered and the choice of base years. In practice most studies of this kind tend to adopt a survey period of 5-7 years and the same approach has been adopted here.

Finally, some of the abovementioned problems may become especially evident as the results are disaggregated for individual sectors in individual regions. In certain cases industrial sectors may be particularly small, and at the regional level consist of no more than one or two local firms. For this reason, and to facilitate assessment, both absolute and percentage figures are given wherever possible. The results pertaining to very small 'token' sectors must be assessed with care as they may derive as much from largely 'random' factors (eg. firm closure) as from 'real' factors determined by competitive and locational advantages. In most cases however, the overall regional results are not likely to be influenced to any great extent.

In conclusion, whilst the shift-share technique is not without its faults, and is probably far from ideal, it is certainly preferable in the present context to making no structural adjustments at all. Without such assumptions it is very difficult to see how any objective estimate of the relative employment performance of the regions could be arrived at.

## 1.2. FRANCE

As an introduction, sections 1.3 to 1.4 outline some of the past trends in regional employment growth in industry. These trends are then compared with developments in other employment sectors. . Section 1.5 gives a background to the analysis and discusses some



French planning regions

of the problems associated with defining the development areas. The detailed results and subsequent discussion are to be found in sections 1.6 to 1.9. Section 1.10 briefly compares the results with equivalent studies on British regional policy. In sections 1.11 to 1.12, we summarise the results and present our general conclusions regarding the effectiveness of French regional policy.

### I.3. Broad trends in regional industrial employment.

To begin, it is useful to outline some of the main historical trends in regional industrial employment. The periods of major interest are as follows ;

(i) 1954-62.<sup>1</sup> Over this period, industrial employment in France increased by 6.2%. Whilst many of the regions in the centre and north progressed particularly well, for example the Paris region 7.9%, Franche-Comté 12%, Bourgogne 9.3%, Bsse.Normandie 19.4%, Centre 13.7%, Hte.Normandie 15.2%, Picardie 19.9%, Champagne 9.3%, the same was not true of south-west or Bretagne. Industrial employment remained more or less static in Aquitaine, Midi-Pyrénées, Limousin and Bretagne, fell by 4.1% in Languedoc and increased by only 2.6% in Auvergne. On the whole, the south and south-east fared reasonably well, with increases of 9.4% in Rhône-Alpes and 3.8% in Provence.

(ii) 1962-68.<sup>1</sup> The increase in overall industrial employment slowed down over this period to 1.85%.

Declining employment levels were to be found in the Nord region -6.1%, and for the first time in Lorraine -4.1%, and the Paris region -5.3%, and employment in Alsace and Rhône-Alpes remained unchanged.

The redistribution of industrial employment away from the major industrial centres had clearly begun. The growth process was one of a slow "spread" effect outwards from the centre - thus, Normandie, Picardie and Centre all had relatively high growth rates of between 11% and 24%. This process was especially noticeable in the west, where growth rates in Loire and Poitou-Charentes were around 15%.

Growth rates in the south and south-west, however, remained relatively low compared to the abovementioned regions - between 3.7% and 5.4% (apart from Limousin 7.1%).

---

<sup>1</sup> J.O. 1979 12th Jan. Table 16 p.19.

\* Note ; these figures cover all industrial sectors(-construction and public works), and are not entirely comparable with our somewhat narrower definition of manufacturing employment(table 3).

In conclusion, although there was some redistribution towards the development areas of the south-west, the effect was by no means substantial - in terms of jobs created in excess of the national average, no more than around 20,000 ( 2.5% of total industrial employment ), for the whole of Aquitaine, Midi-Pyrénées, Limousin, Auvergne and Languedoc.

(iii) 1968-73. Over this period industrial employment increased at an annual rate of 1.9%. In the regions of the centre, west and north, the process of employment spread continued. Normandie, Poitou-Charentes, Bretagne, Centre, Loire, Picardie, Franche-Comté and Bourgogne all having annual growth rates of between 3% and 5%.

On the other hand, in Paris, Lorraine and Nord, annual growth rates were, respectively, .7%, .2% and -.1%.

In the south-west, growth rates were slightly above the national average (2.1 to 2.5%), whilst Provence and Languedoc in the south experienced much lower rates of growth - 1.7% and 1.0% respectively.

Overall, 1968-73 was a period of unprecedented growth in (salaried) manufacturing employment, which increased by 10.7% over these years (although if we measure from 1967 the increase is slightly less ie. 9.2% since employment fell in 1968). By the end of 1974 however, manufacturing employment had begun a steady decline.

(iv) 1974-77.<sup>1</sup> Manufacturing employment declined at an annual rate of -1.3% in this period. The industrial regions were the first to feel the impact of the recession. Employment fell at annual rates of -1.6% in Picardie, -1.7% in Lorraine, -1.9% in Rhône-Alpes, -2.0% in the Paris region and -2.2% in the Nord region.

In the south and south-west, rates of decline were generally either similar or slightly better than the national average. On the other hand, the newly industrialised regions of the west and centre did considerably better, Loire and Poitou-Charentes even experiencing moderate increases in manufacturing employment.

---

<sup>1</sup> INSEE. E & S N°119 Feb. 1980 p.24

In 1977/78 the overall rate of decline increased to -1.8% per annum. In some regions the situation had reached grave proportions by 1978. Picardie, Hte.Normandie, Provence and Nord all experienced rates of decline of between -3.1% and -3.7%. Lorraine -5.1% suffered particularly badly. However, all regions of the south and south-west fared somewhat better than average.

Some regions even managed to make some progress in 1978 in spite of the general downward trend eg. Bretegne 2.4%, Loire .2%, Alsace .8%, Languedoc 1.9%.

In general it can be said that the crises affected most severely the older established industrial centres, whilst for a number of reasons the more recently industrialised regions seemed to have almost overcome the crisis. This could possibly be due to (i) a lower level of exposure to foreign competition, (ii) a higher share of new investment and new industries (regional policy in France may be termed "active" after 1968) as a result of regional policy. (iii) a lower share of declining industries or industries which are subject to severe cyclical effects.

Lastly, one should also bear in mind developments in other sectors of the economy - especially services and agricultural employment. We have concentrated on industrial employment in this section for the following reason, that in general, regional development policies are mainly aimed at promoting employment within the manufacturing sector. For example, in 1976 subsidies to the tertiary sector in France accounted for only 5% of all regional subsidies<sup>1</sup>. Hence, although there is a growing tendency in France, as elsewhere to promote employment in the services sector, for present purposes it is better to confine the analysis to manufacturing employment.

---

<sup>1</sup> J.O. 1978 N°7 p.438.

As a general point, it should be borne in mind that movements in total employment may be very different from trends in the manufacturing sector. The fact that employment in services grew at over twice the rate of manufacturing employment between 1968-75 (1.08% as against 2.25%)<sup>1</sup>, implied that those regions (mainly Paris and Provence) which had very high shares of services employment to start with would be at an advantage.

Indeed, the Paris region had one of the highest rates of growth of total employment (1.07% per annum) in spite of having the fastest rate of decline in industrial employment (-.42% per annum).

In contrast, agricultural employment fell at an annual rate of -5.7% over this period. In several regions; Bretagne, Poitou-Charentes, Aquitaine, Limousin and Auvergne, total employment actually fell due to the negative influence of a large agricultural sector (between 25%-35% of total employment), and in spite of positive rates of growth in both services and manufacturing industries. In other words, these agricultural regions had severe structural disadvantages given the initial importance of this sector in total employment and its overall rate of decline.

The regional distribution of growth in manufacturing employment 1967-74.

The reasons for choosing these two dates should be fairly clear from our preceding discussion. Firstly, both 1967 and 1974 correspond to similar points on the downswing of the business cycle, with correspondingly similar levels of pressure of demand. Total employment (measured at 31st December) fell by -.2% and -.6% and manufacturing employment

---

<sup>1</sup> INSEE " Statistiques et indicateurs des regions francaises". 1979 p.16.



fell by -2.0% and -0.8% in 1967 and 1974 respectively - all of which after extended periods of sustained growth.

Secondly, 1968 corresponds to the start of what one could term "active" regional policy. Total spending on regional subsidies<sup>1</sup> increased from Fr.55.1 m. in 1967 to Fr.101.4m in 1968 and Fr.195.4 m. in 1969. In real terms expenditure more or less levelled out in 1977 when spending increased from Fr.527 m. in the previous year, to around Fr.569 m.. In terms of associated employment, this averaged over 40,000 jobs per year from 1969 to 1974, fell to around 34,000 in 1975 and 35,700 in 1976.<sup>1</sup>

From 1961 to 1967 employment associated with regional loans and grants<sup>2</sup> averaged around 17,000 jobs per year. This earlier period of less intensive regional policy may be considered to have started between 1959/60. In fact, expenditure in 1959 (Fr.46m.) was slightly higher in real terms than in 1967.

Thirdly, the time span covered is reasonable (7yr) for this type of analysis. Since we are comparing the performance of individual industries in the respective regions at two points in time, significant changes in the composition of these industries could render the two series of results incomparable.

The analysis itself is quite straightforward. For each of the 21 regions, manufacturing employment in 1967<sup>\*</sup> was arranged into ten broadly similar groups. The overall national growth rate between 1967 and 1974 was then estimated for each industrial group. With these results it was then

---

<sup>1</sup> E&S N°80 1976 table 1 p.14. & J.O. 1978 N°7 p.438/9

<sup>2</sup> E&S N°80 table 10 p.22. These figures relate to the Fonds de developpement economique et social (FDES).

\* Salaried employment only, measured as on Dec.31st. and excluding construction and public works. INSEE D47 and D22.

possible to produce an "expected" growth series for each sector within each region by projecting employment levels according to the national growth rate.

Clearly then, the expected growth rate for each region is simply the rate at which total manufacturing employment could be expected to increase given that each of the region's industrial sectors grew at the national rate. By subtracting the expected employment series from the actual series, one obtains the residual growth series.

At this point it is perhaps worth considering this residual component in more detail. In a sense the residual or "growth" effect reflects the locational advantage/disadvantage of a region. Conceptually this must be due to cost factors of one kind or another - eg. transport costs, availability of factors or services, factor costs or regional subsidies. Furthermore the residual effect may be due to either, (i) a better than average performance of indigenous firms, (ii) an inflow of new firms. Both are directly influenced by regional development incentives. Unfortunately we have no precise leads as to which of the two effects is most important. As far as the French case is concerned, we may however note on the basis of the distribution of regional subsidies, that in practice a rather large proportion of such aids would appear to have been awarded to expansion projects (approx. 2/3) rather than new firms or decentralisations (J.O. 1978, No 7).

A final point to be taken into consideration is that part of the residual effect may be due to employment multiplier effects or input-output relationships between industries within a particular region.<sup>1</sup> In other words the following analysis implicitly assumes that each industry is independent when in fact interdependence may be quite high at the regional level.

---

<sup>1</sup>See Dixon & Thirlwall 1975 p.175. This distinction is of less importance however when we are mainly interested in the overall effects of regional policy, as is the case.

On the other hand, regional economies are typically highly open, and it is therefore external demand rather than local demand which is normally of greatest importance. However, from an analytical point of view, the order of magnitude of the bias brought about by high levels of intra-regional inter-industry linkages is by no means clear; at the limit, if for example all motor-cars and all car components were produced in region A (or if all cars in A and all components in B), regional and national expected employment series would be the same for both industries, and the residuals would be equal to zero.<sup>1</sup>

### 1.5 The Development Areas.

Basically, we have termed aided regions those which were entitled to either an industrial development grant or an industrial adaptation grant (which were amalgamated in 1972 to become the regional development grant). The geographical coverage of these grants remained more or less unchanged between 1967-74, although the grant value was raised when the revised system was introduced in 1972.

Generally speaking, these same regions were also able to benefit from soft loans from the F.D.E.S.. These loans, aimed mainly at large scale projects of particular regional importance, were of real significance only between 1967 and 1970, and by 1976 had almost ceased altogether. The role of the F.D.E.S. as a source of regional credit was steadily taken over by the "Societes de developpement regional", (S.D.R.).

---

<sup>1</sup> In this case, the shift-share analysis would overlook both regional policy and multiplier effects. To avoid this problem further disaggregation at the sub-regional level would be called for. It does however represent a special case, which, as far as we can see, is not directly relevant in the present context.

These are private credit institutions which operate throughout the country with the exception of the Paris region. Given their wide geographical coverage, however, it is hard to attribute any degree of regional discrimination to their interventions.

The geographical coverage of investment grants and fiscal concessions (1967-72) is made clear from maps 1 & 2 and table 1. Clearly, if one wished to include areas 3 and 4 in the analysis as aided regions, the coverage would be extremely wide indeed. There is perhaps a case for including average assistance areas 3, since although these areas did not qualify for investment grants, they did qualify for a reduction in local taxation (la Patente), which is by far the most important of the fiscal incentives. However, since the rate of local taxation varies considerably by commune and departement it is not at all clear whether a locality where the concession is offered is in fact at an advantage compared to one where it is not, if the tax is initially higher in the former. We have therefore chosen to exclude average assistance areas from our analysis since it is virtually impossible to assess their relative cost advantage.

A further reason for choosing a much tighter definition of aided areas is that detailed figures are available on jobs aided with respect to regional development grants and loans provided by the F.D.E.S.. As regards fiscal aids, these figures are only available from 1971, apart from which one also runs into problems of double counting with grant and loan assistance. From an analytical point of view, it will be interesting to compare the results of our analysis with the official job creation estimates.

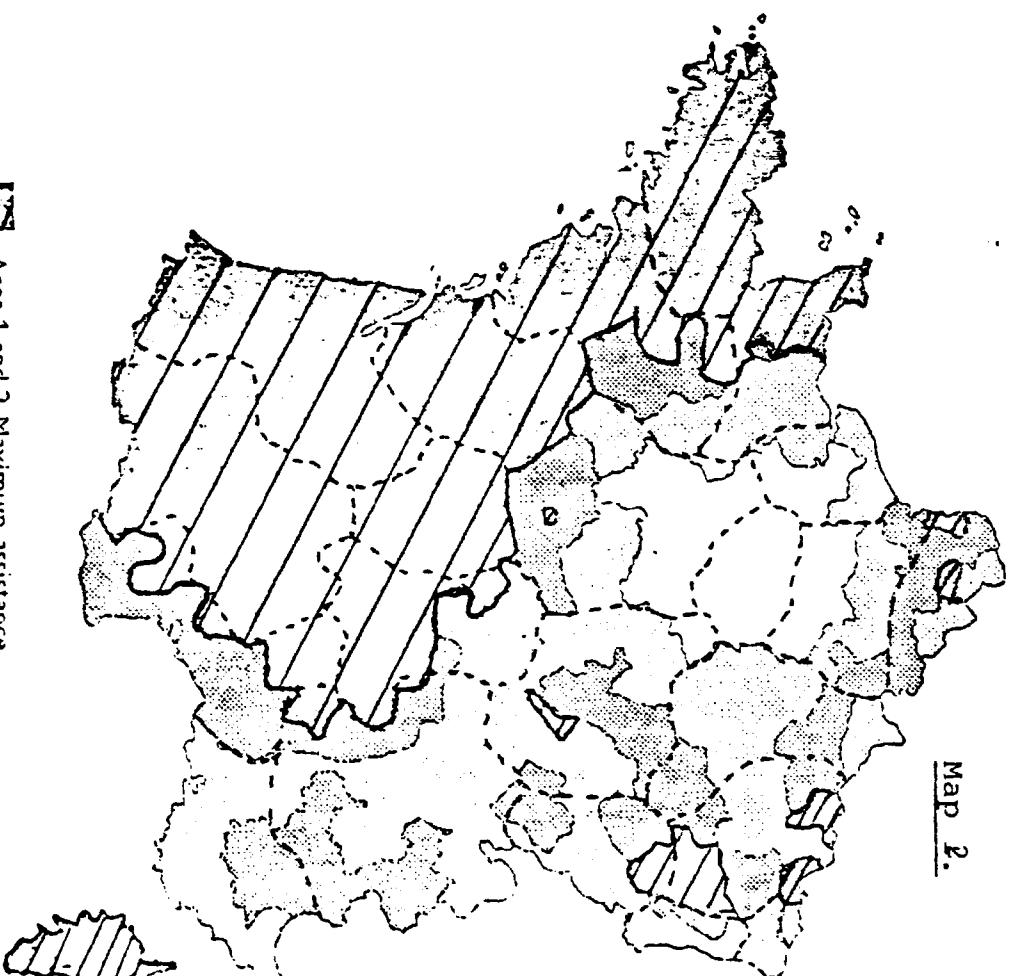
For the purposes of our analysis we have therefore redefined the aided regions and classified them into three groups

FINANCIAL AID AVAILABLE IN DIFFERENT AREAS





Table 1.

Area	Creation or extension of plant	Decentralization from the Paris region	Structural reform
Area 1	<i>a.</i> Industrial development grant <i>b.</i> Reduction in tax on land purchase <i>c.</i> Initial allowance <i>d.</i> Reduction in local taxation <i>e.</i> Reduction in tax on capital gains resulting from the sale of industrial land <i>f.</i> Reduction in transfer expenses <i>g.</i> Manpower aid		Reduction in tax on land purchase
Area 2	<i>a.</i> Industrial adaptation grant <i>b.</i> Reduction in tax on land purchase <i>c.</i> Reduction in local taxation <i>d.</i> Reduction in tax on capital gains <i>e.</i> Reduction in transfer expenses <i>f.</i> Manpower aid		Reduction in tax on land purchase
Area 3	<i>a.</i> Reduction in tax on land purchase <i>b.</i> Reduction in local taxation <i>c.</i> Reduction in tax on capital gains <i>d.</i> Reduction in transfer expenses <i>e.</i> Manpower aid		Reduction in tax on land purchase
Area 4	Nil	<i>a.</i> Reduction in tax on land purchase <i>b.</i> Reduction in local taxation in the case of a transfer from the Paris region	Reduction in tax on land purchase
Area 5	Nil	Nil	Nil

Source: 'Aides au Développement Régional,' op. cit.



Map 2.

-  Area 1 and 2 Maximum assistance
-  Area 3 Average assistance
-  Area 4 Minimum assistance
-  Area 5 No assistance

Areas in which firms are eligible for financial assistance  
 Source: 'Aides au Développement Régional,' DATAR, Paris, 1965.

as follows :

- GROUP 1 : Regions which are completely classed as aided ie. eligible for the regional development grant.  
Bretagne, Aquitaine, Midi-pyrenees, Poitou-Charentes, Limousin, (Corsica)\*.
- GROUP 2 : Regions which are largely classified as aided.  
Auvergne, Pays de la Loire, Bsse.Normandie, Languedoc
- GROUP 3 : Regions which are in part classified as aided.  
Nord, Lorraine.

In order to put the importance of regional aid into perspective, we have classified the twenty planning regions (apart from the Paris region) according to the total value of subsidies awarded between 1960 and 1973. The incidence of regional subsidies is measured as the share of aided investment in total investment. In order of descending importance as regards the incidence of regional aid, we have Bretagne 44%, Limousin 37%, Poitou-Charentes 23%, Aquitaine 18%, Loire 17% and Midi-Pyrenees 15%. Alternatively, we may compare the index of industrial employment with the regional subsidy index. In column 5 we have classified regions as very favoured, favoured or not favoured according to this criterion.

#### I.6. The results of the shift-share analysis.

Table 3 gives the overall results, with actual employment changes disaggregated into structural and residual components. The residual component is also given in absolute figures in the last column.

---

\* Since Corsica is part of the Provence region for statistical purposes, we have implicitly excluded it from the list of aided regions.

TABLE 2

Classification of regions according to total value of subsidies  
awarded between 1960-73. (F.Fr.million.)

Region	1960-73	% dist.	Ind.empl. <sup>1</sup> index 1967	incidence <sup>2</sup>	Ind.empl. <sup>3</sup> % dist.	D.A. status
Nord	381.4	13.5	10.2	10	f.	3
Pays de la Loire	365.6	12.9	4.2	17	v.f.	2
Bretagne	326.3	11.5	2.4	44	v.f.	1
Aquitaine	320.2	11.3	3.4	18	v.f.	1
Lorraine	305.5	10.8	6.0	7	v.f.	3
Midi-Pyrénées	191.4	6.7	2.8	15	v.f.	1
Poitou-Charentes	188.6	6.7	1.8	23	v.f.	1
Rhône-Alpes	135.9	4.8	11.4	3	n.f.	-
Limousin	93.2	3.3	1.1	37	v.f.	1
Languedoc-Roussillon	78.1	2.8	1.6	10	v.f.	2
Auvergne	70.2	2.5	2.3	9	≈	2
Bourgogne	67.0	2.4	2.8	4.5	≈	-
Champagne	63.9	2.3	2.9	6	n.f.	-
Esse. Normandie	61.6	2.2	1.8	9.5	f.	2
Alsace	50.8	1.8	3.5	3.5	n.f.	-
Centre	46.4	1.6	3.6	4.5	n.f.	-
Hte. Normandie	31.7	1.1	3.5	1	n.f.	-
Prov./Côted'Az/Corse	26.6	0.9	3.9	1	n.f.	-
Picardie	17.5	0.6	3.8	1.5	n.f.	-
Franche-Comté	13.7	0.5	2.8	2	n.f.	-
	2,835.6	100.0	100.0			

<sup>1</sup> excluding construction

<sup>2</sup>  $\frac{\text{average annual aided investment}}{\text{annual investment (1962, '70, '71)}}$

<sup>3</sup> vf = very favoured  
f = favoured  
nf = not favoured

Source: E&S N°80 1976 pp.20,21. and INSEE series D N°22 (table 5).

Table 3.

A disaggregation of manufacturing employment changes 1967-1974.<sup>1</sup>

Region.	<u>% change</u> <u>Structural component</u>	<u>% change</u> <u>Residual component</u>	<u>% change</u> <u>Actual change</u>	<u>absolute numbers</u> <u>Employment residual</u>
Paris region	13.5	- 19.3	-5.8	-243,400
Champagne	3.7	6.1	9.8	9,600
Picardie	5.6	13.4	19.0	27,100
Ile de France	13.1	12.5	25.6	22,200
Centre	10.3	17.7	28.0	34,100
Basse Normandie	8.7	21.5	30.2	20,100
Bourgogne	7.0	13.3	20.3	19,500
Nord	-1.5	-2.6	-4.1	-14,100
Lorraine	0.7	-0.1	0.6	-300
Alsace	-5.8	8.6	14.4	15,800
Frankie-Comte	12.6	0.3	12.9	400
Pays de la Loire	8.0	19.0	27.0	41,700
Bretagne	5.3	23.2	28.5	28,600
Poitou-Charentes	5.9	20.8	26.7	20,100
Aquitaine	4.5	6.4	10.9	10,800
Midi-Pyrenees	4.3	4.9	9.2	7,200
Limousin	5.0	-4.0	1.0	-2,200
Rhône-Alpes	6.5	-0.7	5.8	-4,400
Auvergne	8.1	5.1	13.2	6,200
Languesdoc	0.7	-0.6	0.1	-500
Provence/Cote d'Azur Corse	8.4	1.3	9.7	2,400

<sup>1</sup> Manufacturing industries as defined in text, as on December 31st.



One of the most striking features is the very substantial shift of manufacturing employment out of the Paris region - according to our estimates this involved a net displacement of around 243,400 jobs. Whether this was due primarily to "push" factors at the centre (eg.congestion costs, factor shortages) or "pull" forces in other regions (eg.regional development grants) is more difficult to establish. However we may note that of these 243,400 "transferred" jobs, around 136,000 or 54% went to non-classified regions (we exclude Rhone-Alpes). Table 4 gives a summary of the aggregated residuals for reference.

	<u>1</u> Man.empl.1968.	<u>2</u> Residuals	<u>Table 4.</u> $\frac{2}{1} \times 100$
Non-Development areas (less Paris and Rhone-Alpes).	1,350,000	131,100	9.7
Development Areas 1 & 2.	1,105,000	132,000	11.9

Clearly the D.A.'s as defined above have only done marginally better than the non-D.A.'s in terms of residuals and this result should be somewhat surprising.

Looking more closely at the residuals in table 3, the situation becomes much clearer. The highest residuals (above 12%) were to be found in those regions to the west of, and including Poitou-Charentes, Centre, Bourgogne and Picardie. In contrast, the D.A.'s of the south-west and south all had residuals below 6.5 %, two of which being negative, and indicating a relative locational disadvantage.

Lastly, it is worth asking whether the negative residuals of Nord and Lorraine can be partially ascribed to adverse multiplier effects resulting from a high share of declining industries. Examination of the industrial breakdown of residuals for these two regions (table 5) suggests that if such effects existed they were probably limited to firms within the declining sectors (coal and steel) - which explains the high negative residuals for even declining industries.

The probable explanation however, is that severe locational disadvantages existed within these declining sectors, due for example to adverse changes in production or transport costs,

Concerning the question of whether structural factors are able to explain differences in regional employment growth rates, we may note that structural components for category 1 D.A.'s were significantly below the national growth rate of manufacturing employment (unweighted mean of 5.1% as against 7.4%), which is clear evidence of structural disadvantage in the south-west and Bretagne.

Finally, the very poor structural components in Nord, Lorraine and Languedoc appear to explain much of the actual performance of these regions.

Turning to table 5, we have the detailed results of residuals by region and manufacturing sector. All the industrial sectors are covered except for construction and public works (B.T.P.), oil refining and distribution, and production and distribution of electricity, gas and water<sup>\*</sup> - none of which seemed to fit in with our somewhat narrower definition of manufacturing industries. Moreover it is highly unlikely that these sectors would in fact qualify for regional development grants.

---

\* Excluding B.T.P. these sectors accounted for only 4.4% of industrial employment in 1967.

Manufacturing employment residual components 1967-74 expressed in absolute figures, '000 employed.

	Paris-Champ.	Plc.	H.Nor	Centre	B.Nor.	Burg.	Nord.	Lorr.	Alsace	F-C	Loire.	Bret.	P-Ch'ts	Avult.	M-P.	Ldm.	Phone.	Avy.	L-R.	Prov.	
Food and agricultural industries	-8.1	-0.3	3.8	-1.0	0.9	0.5	0.7	-0.1	-1.3	--	-0.2	2.8	5.8	1.3	0.4	-0.3	0.6	-1.1	-0.1	0.1	-4.3
Coal/mining/construction int./ceramics	4.0	2.9	3.3	3.0	4.4	0.4	-0.3	-24.6	-5.6	1.6	0.7	4.0	2.0	1.5	2.0	0.5	0.8	-0.5	0.6	-1.1	0.5
Mining- ferrous and non-ferrous metals	-3.7	-1.8	-0.4	-0.8	-0.2	0.6	0.2	7.2	-10.3	-0.4	-0.9	-0.1	-0.9	--	0.5	-0.5	-0.2	-1.5	-0.5	0.8	13.8
Metal working	-17.8	-1.8	1.6	2.2	4.9	1.8	1.2	3.0	-0.7	0.2	-1.2	1.8	0.8	0.4	-0.1	-0.5	-1.6	5.9	1.1	-0.2	-0.8
Mechanical engineering	-37.5	-1.0	4.7	3.1	5.4	1.5	2.1	-3.7	3.9	2.5	-2.4	4.9	2.6	3.2	1.8	2.2	-0.3	6.5	1.4	1.1	-2.1
Electronics and electric appliances	-49.9	3.8	1.8	3.9	5.0	5.0	1.8	0.7	1.1	3.3	-1.1	7.0	8.2	4.5	2.6	4.0	-0.5	-1.7	-0.3	-0.5	1.2
Transport and armaments	-51.4	1.4	4.5	7.1	2.5	4.8	2.9	6.6	3.9	7.1	6.6	1.8	1.0	1.6	0.4	-2.2	-0.8	2.1	0.4	--	-0.2
Chemicals and rubber	-19.3	2.0	2.9	4.7	4.5	-0.2	4.1	-2.3	4.6	--	-0.7	2.5	1.4	1.3	0.4	-1.4	-0.2	-4.0	0.5	-1.1	0.5
Textiles	-0.5	1.2	2.2	-1.6	-1.0	0.6	0.9	-5.7	2.5	-0.2	-0.2	1.3	0.5	0.6	0.1	2.8	0.2	-3.6	0.4	-0.8	-0.4
Clothing	-13.4	0.1	-2.1	-0.5	1.7	2.1	2.0	1.2	-1.0	-0.1	0.3	5.9	1.9	1.9	0.1	2.4	1.5	-2.7	-0.2	0.3	-1.4
Leather	-1.5	--	-0.2	-0.1	-0.6	---	---	-0.4	-0.3	0.9	-0.1	4.0	0.1	-0.1	1.5	-0.8	-2.1	-2.1	0.9	0.9	-0.3
Paper and printing	-15.4	1.0	2.3	0.9	3.0	1.0	0.9	3.6	0.4	0.7	-0.4	1.5	0.9	1.2	-0.1	0.3	-0.4	-1.4	1.0	0.6	-1.5
Wood industries	-8.2	0.8	0.6	0.6	0.1	1.3	0.8	-2.2	1.9	-1.5	0.7	3.1	2.6	2.2	-0.7	0.2	0.5	0.7	0.1	-0.7	-3.0
Plastics and other industries	-21.2	1.3	2.1	0.7	3.5	0.7	2.2	2.6	0.6	1.7	-0.7	1.2	1.7	0.5	1.9	0.5	0.3	-1.0	0.9	0.1	0.4
TOTAL C.I.A.N.E.	-24.3	9.6	27.1	22.2	34.1	20.1	19.5	-14.1	-0.3	15.8	0.4	41.7	28.6	20.1	10.8	7.2	-2.2	-4.4	6.2	-0.5	2.4
D.A. category						2		3	3			2	1	1	1	1	1		2	2	

Note : less than + or - 0.1 are counted as zero

Table 5 a.

Manufacturing employment residual components 1967-74 expressed as percentage changes.

	Paris-Champ.	Pic.	Nor	Centre	B.	Nor.	Burg.	Mord.	Lorr.	Alsace	F-C	Loire	Bret.	P.	Chts.	Aut.	M-P.	Lim.	Prov.	Prov.
Food and agricultural industries	-9.9	-2.2	16.2	-5.1	4.5	2.2	4.5	---	-6.1	---	-2.0	8.4	14.5	7.0	1.5	-1.8	11.3	-3.2	---	-12.1
Coal/mining/construction int./ceramics	9.9	32.7	22.6	34.8	34.8	9.1	-1.5	-20.2	-11.3	22.0	20.0	37.3	18.8	16.6	18.8	3.2	13.7	-1.5	6.9	-7.3
Mining- ferrous and non-ferrous metals	-26.5	-36.8	-9.4	-67.7	-57.0	8.9	1.7	18.9	-10.9	-33.3	-102.0	-2.8	-88.3	-1.7	42.0	-7.2	-23.7	-6.2	-14.4	24.3
Metal working	-21.5	-5.0	5.9	15.8	29.8	22.0	9.7	8.8	-2.8	1.2	-6.2	12.3	16.5	15.6	-1.1	-8.5	-48.3	11.5	7.6	-5.9
Mechanical engineering	-19.3	-5.1	17.8	15.0	18.7	28.8	9.5	-6.2	15.8	7.4	-8.8	19.5	32.7	32.0	13.4	25.1	-10.3	6.7	13.9	13.2
Electronics and electric appliances	-30.9	103.2	22.4	20.8	29.0	57.7	14.6	5.6	16.3	33.8	-7.9	46.0	201.1	101.6	70.9	56.9	-10.2	-3.8	-9.2	-45.0
Transport and armaments	-25.2	29.2	28.8	29.9	12.5	37.3	57.3	61.7	121.7	75.4	19.2	5.0	6.5	16.4	2.0	-10.6	-15.4	4.7	4.4	-3.8
Chemicals and rubber	-16.1	47.9	15.5	25.3	20.8	-3.1	35.7	-10.7	41.4	---	-16.5	31.6	30.6	26.4	2.7	-12.8	-11.2	-8.6	1.4	-13.1
Textiles	-2.5	3.8	9.5	-9.1	-4.4	16.8	13.0	-4.7	7.0	-0.7	-2.1	18.0	22.5	14.3	2.3	17.5	7.9	-3.8	6.7	-11.0
Clothing	-19.6	2.1	-18.3	-6.0	7.9	40.9	28.3	3.3	-7.9	-0.7	8.0	34.0	21.4	32.4	1.2	25.4	38.9	-8.1	-2.7	5.3
Leather	-11.6	4.2	-9.3	-2.0	-10.7	4.0	2.5	-13.3	-4.5	18.0	-4.6	20.9	1.0	-1.4	7.6	-7.3	-31.0	-11.2	22.8	20.0
Paper and printing	-9.7	12.1	30.4	7.4	26.0	26.8	15.9	15.9	3.9	5.1	-11.4	16.6	12.3	14.4	---	4.1	-6.4	-4.1	17.0	14.5
Wood Industries	-30.0	6.3	7.0	11.3	1.4	21.6	8.0	-20.0	11.7	-18.5	6.9	23.8	32.3	21.5	-3.0	2.1	8.7	3.7	1.7	-12.4
Plastics and other industries	28.2	45.9	17.9	13.5	57.3	36.7	55.0	35.0	20.4	38.2	-7.2	14.2	65.7	18.3	49.1	16.8	41.5	-2.9	22.1	3.4
TOTAL, CUMUL.	-19.3	6.1	13.4	12.5	17.7	21.5	13.3	-2.6	---	8.6	---	19.0	23.2	20.8	6.4	4.9	-4.0	---	5.1	---
D.A. category						2		3	3			2	1	1	1	1	1		2	2

Note : figures less than + or - 1% are not included. Also, sectors where total employment was below 2 th. are indicated by a \*

Table 6

<u>Industrial groupings.</u>	<u>1967-74 National growth rate.</u>	<u>Dep.empl. in 1967(th.).</u>
1. Food and agro-industries.	2.82 %	521.3
2. Coal industry.		
Mining and manufacture of construction materials and ceramics.	-12.94 %	424.2
Glass industry.		
3. Mining (ferrous) and steel industry.		
Mining (non-ferrous) and metallurgy.	1.9 %	228.9
4. Transformation of metals.	11.0 %	402.6
5. Mechanical engineering.	18.1 %	666.0
6. Electronics and electric appliances.	33.08 %	371.8
7. Car industry.		
Aero and naval construction and armaments.	21.86 %	525.1
8. Chemicals and rubber.	14.65 %	411.5
9. Textiles.	-16.4 %	451.5
10. Clothing.	-5.7 %	300.0
11. Leather.	-11.8 %	142.5
12. Paper industry.	7.4 %	
Printing industry.	6.8 %	363.5
13. Wood industry.	4.1 %	235.6
14. Plastics and other industries	13.8 %	193.1

In order that no sector would be particularly small in any region, we have had to group some industrial sectors together as is clear from table 5. On the other hand we have avoided, where possible, aggregating sectors where growth rates showed appreciable differences. Hence for example, textiles clothing and leather are analysed separately. A full breakdown of these groupings is given in table 6. In spite of such aggregation, some sectors in a number of regions were particularly small, and where employment was below 2,000 this has been indicated in table 5, since it seems clear that the corresponding residuals must be assessed with caution.<sup>1</sup>

#### I.7. Some further comments on the residual components.

A number of points may be made with respect to table 5. Firstly, the theory that regional policies should be more effective with regard to "mobile" or "footloose" industries, is given support in that the residual effects have been more pronounced in these sectors. Such footloose firms are generally considered to be more prevalent in groups 5 & 6, i.e. electronics and mechanical engineering.<sup>2</sup> The fact that residual components for these sectors are particularly high in the D.A.'s of Loire, Poitou-Charentes, Bretagne, Aquitaine and Midi-Pyrenees, suggests that regional policy has been particularly successful in attracting mobile firms to these areas. On the other hand the results suggest the opposite for Languedoc and Auvergne, and are decidedly negative for Limousin.

The importance of these "mobile" manufacturing sectors in regional development can be seen by the fact that they are both "fast-growth" industries at the national level (table 6) -- to maintain high growth rates in the D.A.'s it is clear that the latter would have to attract firms in these sectors.

<sup>1</sup> See introduction.

<sup>2</sup> See "The Economics of Industrial Subsidies", (1976, H.M.S.O.). Lever (1972), argues that the major determinant of whether plants are 'mobile' is if external economies are either relatively unimportant or may be easily found elsewhere. Unfortunately this may also mean that such plants have relatively low levels of industrial linkage, Thwaites (1978).

Secondly, it is clear that regional development areas have been less successful in industrial group 7 --- the highest residuals were to be found in regions mainly situated in the north and north-east. A number of explanations may be put forward. Firstly, such industries may be less foot-loose and as such subject to greater external and internal economies. Secondly, since this sector tends to be dominated by multinational enterprises, it is possible that French regional policy has been unable to exert sufficient pressure on the location decisions of these firms. There would seem to be some justification for the second hypothesis<sup>1</sup> (see Part 3).

Thirdly, whilst some regions exhibited a clear locational advantage/disadvantage over the whole range of industries, other regions exhibited markedly varied performance as between industrial sectors. A rough measure of such differences can be found by estimating the (unweighted) coefficient of variation for the residuals of any region.<sup>2</sup>

In the Paris region, the c.v. was relatively low, indicating that the decline of manufacturing employment was evenly distributed over all sectors - suggesting an overall locational disadvantage. In Nord, the other "outflow" region, the c.v. was relatively high, suggesting that any locational disadvantage was confined to specific sectors.

On the other hand, Picardie, Basse-Normandie, Bourgogne, Loire and Poitou-Charentes all had low c.v.'s - that is an even distribution of manufacturing employment growth - which is as one would have expected given that these regions have benefitted more than others from the "spread" effects generated by the outflow of manufacturing employment from the Paris region.

Conversely, the relatively high c.v.'s for most of the development areas are probably mainly due the more effective impact of regional policies within certain industrial groupings.

<sup>1</sup> See D.A.T.A.R. 1974.

<sup>2</sup> Note: some sectors were grouped together for these estimates in order that they should be of roughly equal size.

Note : c.v. =  $\frac{(\text{root mean square deviation (S.D.)})}{\text{arithmetic mean}} \times 100$

Finally, table 7 gives a breakdown of the residuals by industrial sector. For development areas 2 and 3, these are adjusted to approximate the residual component to the employment impact of regional policy. This is because only around one half of the area of these regions actually qualifies for the main regional incentives, and the residuals have been reduced proportionally.

<u>Sector.</u>	<u>Net residuals, '000's empl.</u>		<u>Table 7.</u>
	<u>D.A.'s 1.</u>	<u>D.A.'s 2 &amp; 3.</u>	<u>Net residuals as % of national empl. growth in sector.</u>
Metal working.	-1.0	3.4	5.4 %
Mech. engin.	9.5	4.6	11.7 %
Electronics.	18.8	6.5	20.6 %
Transp. & arm.	- 0	8.8	7.7 %
Chem. & rubber.	1.5	2.0	5.8 %
Textiles.	4.2	-0.8	: (-)15.4 %
Clothing.	7.8	4.2	
Leather.	-1.4	2.6	
Paper & print.	1.9	4.1	23.4 %
Wood inds.	4.8	1.8	68.3 %
Plastics & other.	4.9	3.1	29.3 %

The results largely support our hypothesis about firm mobility in electronics and mechanical engineering. This effect is particularly marked for D.A.'s 1. From our estimates, over 15 % of new employment in the electronics sector was effectively diverted to these regions. In textiles and clothing there is evidence that regional policy helped significantly in slowing down the rate of employment decline in these sectors in the development areas (again D.A.'s 1 in particular).

Lastly, the impressive performance of category 1 D.A.'s in wood industries is probably associated more with the growth of indigenous firms than with the mobility of new enterprises.<sup>1</sup> It is also likely that other factors relating to comparative advantage and factor endowment explain some proportion of the residual component for this sector.

<sup>1</sup> Given that these industries tend to be natural resource based and hence region - specific.



I.8. The employment impact of regional policy - 1967-74.

In order to isolate the employment effects of regional policy from our previous analysis, a number of considerations are first of all necessary.

Comparing the "passive" and "active" policy periods, as we have defined them, entails making assumptions as to what would have happened in the absence of regional policy in both periods.

Table 8 compares regional employment performance over the two periods.

Table 8.

Employment changes in manufacturing industry in the D.A.'s and non-D.A.'s 1962-68 and 1967-74.

<u>1962-68<sup>1</sup></u>		<u>1967-74<sup>2</sup></u>	
	<u>D.A.'s.*</u>	<u>non-D.A.'s.</u>	
1. <u>% change</u>	3.09%	1.14%	8.94%
2. <u>Paris region.</u>		-5.28%	6.47%
3. <u>less Paris.</u>		5.62%	-5.78%
4. <u>D.A.'s 1.</u>	8.54%		14.15%
<u>D.A.'s 2.</u>	11.89%		
<u>D.A.'s 3.</u>	-5.35%		13.91%
			23.75%
			-2.34%

France = 1.85%

France = 7.4%

<sup>1</sup> J.O. N°1 1979  
(ind. empl. - B.T.P.).

<sup>2</sup> INSEE - as table 3  
(note: as on Dec.31).

Employment  
('000) 1967. 1,972.4 3,273.1  
D.A.'s 1 & 2. 1,105.5  
3 366.9  
N.D.A.'s less Paris. 2,011.3

\* The figures relate to entire regions.

The first thing one might ask is whether the fast rates of growth in D.A.'s 1 & 2 are due more to regional policy or simply to the decline of manufacturing employment in the Paris region. Although the later figures show that D.A.'s 1 & 2 experienced faster rates of growth than the N.D.A.'s as a whole, when we compare their performance with the N.D.A.'s - Paris, the results are less impressive.

In general, we find that the relative position of most areas has remained largely unchanged over the two periods in spite of the strengthening of regional policy. Two exceptions to this are, (i) Paris, where the relative rate of decline has increased considerably - possibly due to the 'push' (disincentive)<sup>1</sup> and 'pull' (incentive) effects of regional policy. (ii) D.A.'s 3, where the absolute rate of decline slowed down - although this could simply be due to the higher national growth rate over this period.

Finally we should note that the fastest growth rates for both periods are to be found in the group 2 D.A.'s - the most successful of which, Basse-Normandie and Loire benefitted from both proximity to central areas and regional investment grants. There would thus seem to be a strong case for making regional policy more selective.

Since we have no figures for structural/residual growth components for 1962-68, at the limit we may note that if employment in D.A.'s 1 & 2 had grown at the same rate as the N.D.A.'s outside Paris (ie. 5.62%), there would have been 19,000 fewer jobs created in D.A.'s 1, and 16,600 fewer in D.A.'s 2.<sup>2</sup> In other words we may say that roughly 35,600 jobs in industry were created in the main development areas in excess of what would have been expected had these regions experienced the same rate of growth as the [N.D.A.'s - Paris]

It should of course be recalled that one explanation for differences in employment growth rates (apart from regional policy), is that industrial structure varies as between regions.

---

<sup>1</sup> Taxes on factory and office space in the Paris region were introduced in 1960, but remained low until 1971.

<sup>2</sup> Assuming that on average  $\frac{1}{3}$  of D.A.2 employment is classified as such.

The influence of industrial structure has however been taken into account for the period 1967-74 in our previous analysis, and on the basis of these figures we may make some more accurate estimates of the employment impact of regional policy.

Since official figures exist with respect to jobs aided by investment grants and loans, it will be interesting to compare these figures with our own estimates. Taking into account various lags in investment and job creation, we may estimate that over the period 1967-74 some 268,000 jobs were aided by F.D.E.S. subsidies. Whether all or even most of these jobs would have been created in the absence of regional policy is of course another matter.

However, returning to our own estimates, we must examine whether the residual growth component of the D.A.'s represents the least biased estimate of employment growth that may be directly attributed to regional policy, (the rest being attributable to regional industrial structure). It is of course possible that some of the residual component is due to other causes such as factor costs or availability.

This poses the problem of how to interpret the residuals for these regions, since they may only in part be due to the effects of regional policy. In fact, this criticism may equally be applied to the rather wider question of equating the residual or "growth" components with regional policy impact.

In most studies to date, the general approach to estimating the employment impact of regional policy has been as follows. Firstly the residuals for a "policy-off" period are estimated. These results are taken to represent the underlying employment growth trend in the D.A.s relative to the rest of the country. Next, the residuals for the "policy-on" period in question are calculated. Finally, the trend for the "policy-off" period is applied to the "policy-on" results, to obtain an estimate of the employment impact of regional policy<sup>1</sup>.

In practice this type of analysis implicitly assumes that all other factors that may have affected location decisions remained unchanged over the policy-on period. Furthermore,

---

<sup>1</sup> See, for example, Moore & Rhodes (1973)  
Mackay & Thomson (1979)

these techniques are only justified when the individual industrial sectors considered are all fairly similar in composition and structure as between regions. In the case of Italy for example, as we shall see, this may represent a fairly difficult problem of interpretation.

In spite of these possible criticisms the abovementioned authors maintain that the shift-share approach provides a fairly accurate estimate of the impact of regional policy, and for a number of reasons. Firstly, the overall results are generally fairly consistent -- all the D.A.s show positive differences between actual and expected employment series. Secondly, the divergence between actual and expected employment showed much less variability in non-manufacturing industries and services. Lastly, and most important, studies on the movement of firms to D.A.s tend to confirm the validity of the shift-share estimates<sup>1</sup>, and the orders of magnitude contained therein. Although shift-share methods tended to produce slightly higher policy estimates, this is rather to be expected given (i) part of the residual effect may be due to regional linkages and a subsequent regional multiplier effect, (ii) firm movement studies do not cover the impact of regional incentives on indigenous firms.

I.8.1. For the purposes of the present analysis, however, there are a number of problems involved in adopting the same approach as the British shift-share studies. Firstly, the residuals for some of the D.A.s are actually negative. This suggests the presence of certain locational disadvantages that are not taken account of. Secondly, it is not possible to clearly define policy-off and policy-on periods as in the U.K. studies. One would really have to go back as far as 1955-62 at the very least. At that point it does not seem feasible or realistic to extrapolate a trend as far as 1967-1974. Thirdly, a large part of regional employment gain is clearly due to decentralisation from the Paris region. It seems likely therefore, that a certain proportion of these gains may be explained in terms of high wage and congestion costs in

---

<sup>1</sup>See Ashcroft & Taylor(1979)  
Mackay & Thomson(1979)

Paris<sup>1</sup> that is, factors unrelated to any form of regional policy.

The most appropriate way of proceeding that suggests itself would be to apply an econometric model to regional employment changes that includes independent variables covering factor costs and availability and some other measures of locational "desirability". Clearly it is better to use the residuals themselves as the dependent variable since this excludes the effects of industrial structure on employment growth. The model tested was the following:

$$\begin{aligned} \text{EMPL} = & a_0 + a_1 \text{WAGE} + a_2 \text{UNEMPL} + a_3 \text{TIME} + a_4 \text{URBAN} \\ & + a_5 \text{R.P.} + a_6 \text{INFRA} + a_7 \text{DUMMY} , \end{aligned}$$

---

<sup>1</sup>The same point may be made in relation to the U.K. studies where London appears to have had much the same experience as Paris. Furthermore it does not seem reasonable to fully attribute such losses to the impact of disincentive policies.

where:

- EMPL = Employment residuals for manufacturing industries 1967-74 (expressed as percentage changes\*)
- WAGE = Average yearly income per person employed in manufacturing industry 1971<sup>1</sup>
- UNEMPL = An average of 1968 and 1973 regional unemployment rates<sup>2</sup> as a proxy for labour availability
- TIME = Distance of main regional town or towns from Paris, measured as scheduled train time from Paris 1968<sup>3</sup>. This variable was included to examine the importance of distance on firms moving out of the Paris region
- URBAN = Level of urbanisation, measured as percentage of population resident in a classified urban zone (Z.P.I.U.)<sup>4</sup>
- RP = Expenditure on regional investment grants and loans per person employed in manufacturing industry 1967-74 at 1960 prices\*
- INFRA = An index of average expenditure per head on infrastructure grants and direct central government capital expenditure over the period concerned<sup>5</sup>
- DUMMY = Dummy variable. These were added for regions which showed clear evidence of strong locational disadvantage from their residuals, namely, Paris, Limousin, Nord (see Table 3).

---

\*See text for sources. Note manufacturing industries is here defined as groups 4 to 14 in Table 6.

<sup>1</sup>Statistiques et indicateurs des regions françaises. INSEE.

<sup>2</sup>Ibid. Note: the definition "population disponible à la recherche d'un emploi" (P.D.R.E.) was used.

<sup>3</sup>Ibid. <sup>4</sup>Ibid. Note Z.P.I.U.=zone de peuplement industrielle et urbain.

<sup>5</sup>Ibid. and MacDougall Report 1977.

Before presenting the results, some general remarks on the model should be made. Firstly, the model does not attempt to explain the overall pattern of manufacturing employment changes -- this would be much too great a task for such a simple model. Here we are only attempting to explain changes in employment that cannot be explained by industrial structure (since the structural effect is eliminated) and that are directly related to regional investment incentives. Hence we do not, for example, include sectors 1-3 in Table 5, since these groups would not normally qualify for such incentives.<sup>1</sup> As a consequence, this approach tends to exclude most of the less mobile, natural resource based industries, and is perhaps an advantage since the model would be quite unsuitable to explain locational changes in such industries.

Concerning the independent variables, these are all related to factor costs or availability in one way or another. The wage, unemployment and regional policy variables are clear cut examples of this and should need no further discussion. The level of urbanisation and expenditure on infrastructure were included as general indicators of possible external economies and the overall level of desirability of a region from the point of view of potential investors and management. There are however drawbacks with both of these indicators. In practice, the relationship between external economies and urbanisation may not be clear cut. It is quite possible that beyond certain limits urbanisation has a negative effect upon external economies --

---

1. These sectors include, construction, mining, food and agro-industries (until 1976). In general, grant requests from firms whose activities are linked by their nature to a particular location, are not taken into consideration.

for example, congestion costs, may lead to dis-economies of agglomeration, and firms may begin to move out of the congested centres. This might indeed be the case for the Paris region in particular. In order to partially avoid this problem, a rather broad indicator was chosen; that is, the overall level of urbanisation, rather than an alternative such as the proportion of regional population in towns above x thousand inhabitants.

The possible objection to the infrastructure variable is that it does not actually measure the level or quality of overall infrastructure in any region. Furthermore the needs of some regions may be greater than others and may therefore require greater outlay to reach equivalent standards. On the other hand, it is not at all clear how the overall level of regional infrastructure could actually be measured comprehensively. However, it does not seem unreasonable to expect that a sustained effort in favour of certain regions over a seven year period should induce some employment effects in manufacturing industry, and it is on this basis that the variable has been included.

The variable TIME was included for a specific purpose. Given the importance of industrial decentralisation from the Paris region, it seemed probable that distance from the original location might be a significant factor in explaining the spatial distribution of such moves, and therefore to some extent the overall regional pattern of employment growth. There are basically two reasons for expecting such spatial "inelasticity", firstly, relocation involves costs and risk -- it is possible that these may both be positive functions of distance from the original location. This may particularly be the case where information costs about alternative locations are also a positive function of distance. Secondly, decentralisation



from Paris may well involve loss of contact with suppliers of inputs and raw materials, and perhaps more important, loss of competitive edge in the important Paris market due to higher transport costs.

However, even if a significant coefficient is found for this variable, one should not immediately conclude that the abovementioned cost factors are entirely responsible. It is perfectly possible that, when firms are constrained to decentralise from Paris, they do not undertake a detailed search for alternative locations but tend to choose the nearest low-cost location -- in other words, they may act as profit-satisficers rather than profit-maximisers<sup>1</sup>.

Finally, dummy variables were added for regions which showed clear evidence of locational disadvantage in their manufacturing employment residuals. This took the value of one for Paris, Nord and Limousin, and zero for all other regions. In the case of Nord and Limousin, it seemed clear that in spite of rather high levels of expenditure on regional incentives these regions were either (i) unable to attract new industry, or (ii) suffering from a poorer than average industrial structure, and that in any case, the impact of negative multiplier effects could be expected to be significant<sup>2</sup> (Nord and Limousin had overall growth rates of -4.1 and 1.0% respectively over this period). In the case of Paris the dummy variable would be expected to pick up the effects of (i) disincentive policies, and (ii) cost push factors, such as congestion costs, that were not fully covered by the other variables.

---

<sup>1</sup> See for example P.M. Townroe (1972) R. Studies "Some behavioural considerations in the industrial location decision."

<sup>2</sup> Whilst multiplier effects can generally be considered to be captured in the residual component of the analysis, what we are trying to do here is to explain these effects. Moreover, since the present analysis involves only manufacturing sectors (4 - 14), it is clearly plausible that poor regional performance in other industrial sectors could have influenced output and employment growth in manufacturing.

I.8.2.

The results of the estimated cross-section regression, (1967-74) are given below:

$$\text{EMPL} = 51.64 - 3.64 \text{ TIME}^{***} - 2.02 \text{ WAGE}^{**} + 0.0121 \text{ RP}^x$$

(0.79)                      (0.85)                      (0.006)

$$- 24.24 \text{ DUMMY}^{***}$$

(4.63)

---


$$R^2 = .804$$

No. observations = 21

\* significantly different 90% confidence level

\*\* from zero at or above 95%                      "                      "

\*\*\*                      "                      "                      99%                      "                      "

Note: figures in brackets are standard errors.

---

The coefficients on URBAN and INFRA were found to be insignificantly different from zero. The coefficient on UNEMPL had the wrong sign (negative) and was not significant. These three variables were therefore omitted from the final equation.

Some of the limitations of the URBAN and INFRA variables have already been noted. However, we may add that in the case of INFRA, it was to say the least highly unexpected, that there proved to be no correlation whatsoever between public expenditure on infrastructure and expenditure on regional financial incentives. One would perhaps have expected some coordination of these two instruments. Concerning the regional unemployment variable, we should perhaps note that similarly insignificant results for this variable were also found in a U.K. study about the impact of regional policy on the movement of industry within Great Britain<sup>1</sup>. This is an important finding since it casts considerable doubt on the possibility of

---

<sup>1</sup>D. MacLennan & J. Parr (1979), chapter 2.

regional differences in unemployment rates bringing about a redistribution of manufacturing employment. Either there is little influence of regional unemployment on regional wage rates\*, or firms do not place high importance on availability of labour<sup>1</sup> (unless of course labour markets in central areas are particularly tight -- this did not appear to be the case over the period considered).

In conclusion we may state that differences in regional manufacturing residuals are largely "explained" by (i) differences in regional wage rates, (ii) the effective distance of the region from Paris, (iii) unspecified negative locational factors (dummy variable), (iv) employment growth induced by regional policy.

To provide a rough comparison of the impact of regional policy expenditure and regional wage rates, we may note that the coefficient values suggest the following. Firstly, to achieve a 1% increase in regional manufacturing employment<sup>2</sup> would, on average, require a 3.41% fall in the regional wage rate. The value of this fall would amount to around 495 Fr per person employed per year<sup>3</sup>. Secondly, to achieve an equivalent impact by means of regional investment incentives would require an expenditure of Fr. 82.6\*\* per person employed for the whole period.

As a result, one might be tempted to argue that labour

---

<sup>1</sup> Moreover, it is the spatial distribution of unemployment which is important. Unemployment which is concentrated in a few towns would be much more effective in attracting industry than unemployment which is spread over a wide, perhaps rural, area.

<sup>2</sup> Over a seven-year period.      <sup>3</sup> 1971 prices. Relative to average wage.

\* In a simple regression of UNEMPL on WAGE, the UNEMPL coefficient was found to be insignificantly different from zero.

\*\*

At constant 1960 prices.

subsidies are likely to be far less cost effective than investment incentives. The validity of such an argument would however depend on the extent to which the WAGE variable accurately measures unit labour costs in manufacturing. It is possible that the variance of the latter is smaller than the variance of the WAGE variable in which case, the importance of regional wage differentials may have been underestimated. This may be the case if, for example, as is quite possible, part of the variance in the WAGE observations is explained by regional employment structure. A similar position would arise if, again, regional wage differentials were to some extent due to differences in regional labour productivity. To sum up, there is good reason to believe that if figures on regional U.L.C.s had been available, the results might have suggested the possibility of a more active role for labour subsidies. On the other hand, given the orders of magnitude mentioned above, it seems hardly likely that our conclusions as to the relative importance of investment incentives and labour subsidies would have been overturned.

Calculating the employment impact of regional policy from our estimated equation is fairly straightforward, given the overall level of expenditure on investment grants and loans.

Out of a total net residual of 235,400 jobs in regions in receipt of regional financial aids, the value of the estimated regression coefficient would suggest that some 103,900 jobs may reasonably be attributed to regional policy.

If we assume that on average, expenditure on regional policy was equally effective in development areas and non-development areas<sup>1</sup>, we may estimate that the employment impact

---

<sup>1</sup>In practice, all regions apart from Paris qualified for some form of regional aid.

in category 1-3 D.A.s amounted to some 84,180 jobs -- the rest going to the N.D.A.s.

It is interesting to compare these results with the alternative procedure of estimating regional policy impact -- that is, summing the residuals themselves. This approach gives an estimate for the D.A.s of 90,900 jobs, which is quite close to our estimated figure of 84,180. The difference is possibly due to the somewhat arbitrary allocation of residuals in D.A.s 2 and 3<sup>1</sup>.

In conclusion, the above results would seem to suggest that, on average, the residual component in our shift-share analysis gives a good approximation to the regional policy effect.

I.8.3. At this point it would be interesting to attempt a breakdown of the r.p. effect at the regional level. Clearly it is not feasible to hypothesize a strict linear relationship between expenditure on r.p. and employment creation at the level of individual regions. The approach adopted has therefore been to present the residuals themselves (adjusted for D.A.s 2 and 3) as reasonable proxies for the employment impact of regional policy. The results are presented below.

---

<sup>1</sup>This problem arose since only approximately one half of the area in D.A.s 2 and 3 qualified for the main regional investment grant. We therefore attributed 50% of the residuals in these regions to the impact of regional policy (see back).

Table 9: The employment impact of regional policy by region

<u>Effectiveness of policy</u>		(a)		(b)		R.P. expenditure index
		Impact as % 1967 employment levels	Distribution of total impact	Impact as % 1967 employment levels	Distribution of total impact	
	D.A.					
HIGH						
Bretagne	1	30	23.0	30	19.2	8.9
Basse Normandie	2	30	9.8	30	8.3	2.7
Poitou-Chts	1	25	18.3	25	15.4	7.7
Pays de la Loire	2	20	18.5	20	15.5	14.1
MODERATE						
Lorraine	3	11	8.9	12	8.4	15.1
Midi-Pyrénées	1	7	7.9	12	11.0	11.8
Auvergne	2	6	3.3	7	3.0	2.8
Aquitaine	1	6	8.4	7	7.8	11.7
POOR						
Nord	3	1	1.8	3	7.8	19.0
Languedoc	2	0	0	3	1.3	2.8
Limousin	1	0	0	6	2.2	3.4
			<u>100</u>		<u>100</u>	<u>100</u>
total impact (a) = 90,900; (b) = 112,850.						

In particular one should be careful in interpreting the results for Nord, Limousin<sup>1</sup> and Languedoc. In the case of

<sup>1</sup>The residual for Limousin was actually highly negative (-7.8%), but is here represented as zero on the assumption that we should eliminate the hypothesis of a negative regional policy impact at the level of the individual region.

Nord and Limousin, significant negative locational factors were clearly present, being allowed for by the dummy variable. On the other hand, a very low or near zero r.p. impact is theoretically possible in spite of quite high expenditure on investment incentives. This could occur if the region failed to attract new firms from other regions and most of the investment grants and loans went to firms already operating in the region, which would have invested anyway.

The above explanation would seem to be the only feasible one for the totally negative results obtained for Limousin. This region stands out as the only D.A. to register negative residuals in all of the major 'growth' industries -- sectors in which one would expect regional policy to have been most active (see Table 5).

However, given the problem of interpreting negative residuals, we have chosen to present two alternative estimates of regional policy impact. In Table 9 under the first hypothesis, we give the net manufacturing residuals for sectors 4-14. Under the second hypothesis we sum only the positive residuals for these sectors -- this assumes that the r.p. effect cannot feasibly be negative for any sector within any region<sup>1</sup>. It is notable that the two sets of figures do not vary greatly for most of the regions concerned, although, overall, the policy effect implied under hypothesis (b) would appear to be somewhat high. It seems more reasonable, therefore, to consider these figures as maximum policy impact estimates for any region.

<sup>1</sup>

Although it is of course possible that regional incentives could actually have served to divert firms (and jobs) from one development area to another.

438

The last column in Table 9 gives the distribution of regional financial aid for the development areas. It is interesting to compare these figures with the distribution of policy impact. On average, regional policy in Bretagne, Basse Normandie and Poitou-Charentes appears more than twice as effective as the shares of r.p. spending would suggest.

On the other hand, for Nord, Languedoc and Limousin, r.p. appears to have been only half as effective as expenditure levels would suggest -- even on the most favourable assumptions (i.e. hypothesis (b)).<sup>1</sup>

It should of course be remembered that the residuals include the effects of regional wage differentials and the influence of distance from Paris. However, firstly, the wage factor, although highly significant was very weak. For example, in the case of Bretagne, lower wage rates could not reasonably account for more than 12% of the residual effect? For most other regions this effect would have been substantially less. Secondly, it is probable that the TIME variable also includes the indirect effects of regional policy. That is, (a) the extent to which total industrial movement from Paris to the provinces has been increased due to the pull-effects of regional investment incentives, and (b) the push-effects of regional dis-incentive policies in the Paris region.

For the abovementioned reasons, it seems reasonable to regard the estimates in Table 8 as largely representing the direct and indirect effects of regional policy.

I.9. In conclusion we may make the following observations.

- (i) The estimated employment impact of regional grants and loans over the period 1967-74 comes to 103,900 jobs of which

---

<sup>1</sup> It should be recalled that the use of a dummy variable for Nord and Limousin revealed the existence of strong locational disadvantage in these areas. Whilst it is of course possible that a positive regional policy effect could have been largely 'crowded out' by the former (eg. poor indigenous performance), the fact that residual components in sectors where r.p. would seem to have been most effective in other development areas (eg. mech. and elec. engin, chem.), were generally either low or negative, would tend to suggest that this was not in fact the case.

<sup>2</sup> Given the divergence of wages in Bretagne from the mean, and given the values of the other variables for Bretagne.



84,180 may be attributed to the main development areas. These figures compare with an official estimate of 268,000 jobs aided over the same period.

Clearly there is a fundamental difference between "jobs aided" and "jobs created", since some proportion of these new aided jobs would certainly have been created anyway, in the absence of regional policy( around 61% according to our figures).

One would expect such "overlapping" or "wastage" to be lower in the case of new investment, where, at the margin, investment grants and loans may be very important in the decision to invest and in the choice of where to locate.

In France, however, rather a high proportion of financial aid went to existing enterprises (around 2/3) and less than one third towards the creation of new enterprises.<sup>1</sup>

(ii) There appear to have been significant differences in the impact of regional policy as between regions. Around 60%-70% of the total policy impact occurred in the four western regions -- this is a very high figure considering that around one third of total expenditure on investment grants and loans went to these regions. If we consider that, overall the ratio of jobs created (r.p. effect) to jobs aided is around 1:2.6, then it is clear that for the West of France there is almost a one to one relationship between job aid and job creation.

(iii) It seems probable that the "efficiency" of r.p. was related to the ability to attract new industry, one of the main determinants of which being the effective distance of the region from Paris. This may explain why r.p. appeared

---

<sup>1</sup> Journal Officiel (J.O.) No.7 p.438. However, these figures largely appear to be in line with the general pattern of employment growth in France. As Prud'homme has remarked on this subject, "The picture that emerges is quite different from that based on massive decentralisations by larger firms. Rather, what accounts for the increase in industrial employment is typically the 100 employee firm that has gained another thirty employees." Hansen(1974) p.60. The comment however relates to the mid-late '60's.

to be more effective in the West than in the South West and South which were effectively farther from the Paris region.

- (iv) Surprisingly, expenditure on infra-structure proved to have no explanatory power in our estimated equation. This should not, however, be taken to mean that such expenditure is unimportant as for promoting regional development. The result is more due to the fact that the distribution of infrastructure spending is largely unrelated to the aims of regional development policy. The fact that there was no correlation found between INFRA and R.P. supports this argument<sup>1</sup>. As a corollary, it seems that a more active role might be sought for infrastructure policy.
- (v) The main policy implication of the preceding analysis is that financial incentives should be made more selective. For instance, the present ceiling on investment grants in the South West and South could be raised relative to the West. As a result, firms would have the financial inducement to decentralise over greater distances. This, in turn would tend to raise the share of new firms moving to the South West and South, thereby increasing the efficiency of r.p. in these regions.
- (vi) Given that regional policy seems to have been more effective in some sectors than in others (notably electronics and mechanical engineering), there would seem to be a case for including some type of sectoral policy in the overall regional development "package". This could take the form of either, (i) differentiated financial incentives according to sector, or, (ii) greater direct involvement, such as coordination of infrastructure works or stricter location controls. In the following chapters, we shall discuss these alternatives in more depth.

In general the position of many of the less-developed regions of the South-West looks bleak. In addition to raising the level of financial aid to investment it is probable that a

---

<sup>1</sup> In fact, the influence of INFRA was probably fairly neutral in the regression analysis given that regional differences in expenditure per head were generally very small.

more concentrated effort on raising the overall level of infra-structure is required, particularly in some of the more rural areas.

Unfortunately we have no information on the the spatial distribution of aided employment within regions. However, if the experience of Limousin is anything to go by, it is clear that largely rural areas lacking in urban infra-structure are not only unable to attract new firms but are moreover losing employment in already existing enterprises.

Given the high incidence of aided investment in Limousin, (table 2), one is led to the tentative conclusion that regional policy in these areas has been oriented more towards propping up existing firms than inducing the establishment of new firms. One is also led to speculate as to whether the same is largely true of rural areas elsewhere in the south-west, and whether the impact of regional policy in these regions has been mainly centred in the large urban areas. Certainly, the evidence is not convincing that the "spread" effects of economic growth will eventually reach even the most peripheral regions. Indeed our evidence would seem to show that large areas may be altogether left out of the growth process. Certainly distance is an important factor, and it is clear that the regions to reap the most benefits from the decline of manufacturing employment in Paris are those which are geographically closest.

#### 1.10. A comparison of French and British experiences.

It is interesting to compare our results with those of similar studies on the impact of British regional policy. For example, MacKay and Thomson<sup>1</sup> found that the direct policy effect in the U.K. over the period 1968-73 amounted to 39,600 jobs. This represents an annual rate of job creation of 17,900 compared to the French figure of 14,840. However expenditure on regional incentives was considerably higher in the U.K. - £ 1,137 m. between 1968-73, compared to Fr. 2,363 m\* between 1967-74 in France. On the face of it, British regional policy would seem to be much less cost effective, however a number of factors

---

<sup>1</sup> S.J.P.E. November 1979, pp. 245-46. Figures adjusted for fitted time trend 1952-63.

\* £ 179 m. at 1970 exchange rates.

must be taken into account. Firstly manufacturing employment in the U.K. development areas increased steadily over this period in spite of the overall downward trend in total manufacturing employment, and this by itself is quite an achievement. On the other hand 1967-74 corresponded to a period of unprecedented growth in manufacturing employment in France. In other words, the circumstances for achieving a redistribution of manufacturing employment were certainly much more favourable in France over this period.

Secondly, given that on the whole, a relatively high proportion of investment grants in France went towards the enlargement of existing enterprises, it would seem that U.K. regional policy was probably more successful in actually promoting the movement of firms to the D.A.'s.<sup>1</sup>

Thirdly, given the high level of expenditure on investment subsidies in the U.K.\*, it is quite possible that regional policy had a significant impact on the overall level of investment after 1963.<sup>§</sup> In other words a case can be made for stating that British regional policy affected not only the distribution of employment (residual component), but also the level of employment (structural component). As the outcome of this, it is possible that the above figures may underestimate the overall impact of British regional policy.

Lastly, it is interesting to note that in the preceding period, 1963-68, the estimated employment impact of U.K. regional policy was more or less the same, whilst expenditure was considerably lower (£ 288 m. at 1970/71 prices).<sup>2</sup>

---

<sup>1</sup> MacKay and Thomson op.cit. pp. 250-252. "It seems reasonable to claim that...alteration in the scale and direction of plant movement plays the major role in transforming industry by industry performance."

<sup>2</sup> Ibid. p. 246.

\* Of the £1,187 m. spent on regional aid, over 40% was accounted for by the Regional Employment Premium. Thus, investment incentives accounted for around £700 m. which is still considerably higher than the French figure. See ibid. p.235.

<sup>§</sup> The evidence on this point is not entirely conclusive, (LUND 1976). See annex 2 for further discussion.

I.11.

The post 1974 period.

From 1974 onwards has been a period of almost continuous decline in industrial employment. Furthermore differences in regional performance have widened.

By 1978 some regions were clearly over the worst, whilst in others employment was falling at a steady or increasing rate eg. Lorraine -5.1%, Hte.Normandie -3.5%, Nord -3.3%.<sup>1</sup> Already by 1976, it was clear that regional development subsidies were also being used to prop up employment elsewhere than in the major development areas. Out of a total of 35,700 jobs aided in 1976<sup>2</sup> around 13,500 were attributable to the large industrial centres of Lorraine, Nord, Alsace and Rhone-Alpes, whilst only 10,000 jobs were aided in the five group 1 D.A.'s. The situation in 1977 appears to have been similar.

A final point should be made, that the regions we have classified as having experienced a high regional policy impact (table 3), are also the regions which appear to have suffered least from the current recession. Bretagne and Loire, for example actually experienced moderate growth rates in 1978 (2.4% and 0.8% respectively), whilst employment remained more or less constant in Poitou-Charentes and fell only slightly in Basse-Normandie. Although, in terms of jobs aided these regions have remained relatively favoured in recent years, it is probable that the high rate of injection of new industries up until 1974 also helped to contribute towards their better than average performance in the late 1970's. As MacKay and Thomson have pointed out, regions which receive such an injection of new industries are likely to retain a substantial competitive advantage which con-

---

<sup>1</sup> Figures relate to 1978. E & S Feb.1980 N°119 p.24.

<sup>2</sup> J.O. April 18th. 1978 p.439.

tinues to influence performance in later periods.<sup>1</sup> Basically, this advantage is attributable to an overall improvement in capital vintage brought about mainly by the inflow of new firms to the development areas.<sup>2</sup> It is also possible that investment grants will speed up the rate at which existing firms will scrap old plant and machinery - although this will tend to improve capital vintage and competitive advantage, such a process may also be associated with some substitution of capital for labour and the short term employment effects may be either positive or negative (see Ch.8).

In general, however, it is to be expected that the initial impact of regional policy would also lead to an improvement in performance which should be more than transitory.

#### I.12. Concluding comments on France.

In general we may conclude that French regional policy has been largely successful, both in absolute terms of jobs created and in comparison with regional policy elsewhere. On the other hand, the impact has varied greatly at the regional level. In particular there is some doubt as to whether French regional policy in its present form is capable of raising regional growth rates in some of the more isolated rural areas of the south-west.

It also remains to be seen whether regional policy has been equally successful under the more difficult economic conditions of recent years. One may also ask whether it will continue to benefit mainly the less developed regions, or will rather be aimed at maintaining employment levels in the established industrial centres.

Furthermore, the argument for a wide coverage of regional policy which seemed justified for the pre-1962 period and possibly up until 1967, no longer seems valid given that a number of group 2 D.A.'s were the first to have benefitted from the decline of manufacturing employment in the Paris region, and would possibly have done so even in the absence of regional policy.

Certainly, if regional policy is meant to promote the manufacturing base of the less developed regions, there is a case for making it more selective.

---

<sup>1</sup> Op.cit. pp. 252-255.

<sup>2</sup> This would also result in a higher residual component in terms of our present analysis.

II.1.

A comparison with Italian regional policy.

A comparison of the effectiveness of regional policies between countries is a somewhat difficult and delicate matter. Nevertheless it is possible to obtain some interesting results. A study similar to our previous section on France already exists with respect to Italy, and a few adjustments make the results readily comparable.

The Italian study in question<sup>1</sup> relates to the period 1970-75. The four year period 1971-75, was one of relatively high spending on regional policy - at 1975 prices, lire 6,357 Billion, compared to lire 4,076 billion from 1966-70, and lire 3,103 billion from 1961-65.<sup>2</sup>

Overall, the growth rate of dependent manufacturing employment remained fairly stable when compared to the average for the earlier period 1961-70, but terminated after the recession in 1974/75.

Between 1970 and 1975<sup>3</sup> total manufacturing employment increased by 157,000 jobs. 82,300 of these jobs were located in the south - that is 52% of the total increase. However, this was the only major employment sector apart from services to experience such good performance - total employment in the south actually fell over this period by 2,000 jobs.

Taking employment in manufacturing industry, the above-mentioned author obtained the following overall results (see table 1). Clearly there was a substantial amount of decentralisation - unrelated to regional incentives - away from the old-established centres of the north west, towards the more central regions (Marche and Lazio in particular). As table 1 shows, the structural components for the centre and south

---

<sup>1</sup> M.D'Antonio (1977).

<sup>2</sup> S.V.I.M.E.Z. (1973) p.81. Total Cassa expenditure.

<sup>3</sup> M.D'Antonio op.cit. p.1047. Excluding energy and construction.

Table 1.

Residual and structural components, Italy 1970-75.(th.empl.)<sup>§</sup>

<u>Region or area.</u>	<u>residual component</u>	<u>structural component</u>	<u>total change</u>		
<u>North West</u>	- 126.7	43.2	- 83.5		
<u>North East</u>	1.0	- 5.6	- 4.6		
<u>Centre</u>	48.0	-16.0	32.0		
<u>South ;</u>	77.7	-21.6	56.1		
				<u>As % of 1971 empl.levels.</u>	<u>Residual as % of 1971 employment levels.</u>
Campania	(26.6) 27.2	- 5.2	9.3		(11.2)
Puglia	(24.1) 24.6	- 4.4	12.9		(15.4)
Abruzzi	(15.6) 14.0	- 2.5	18.8		(25.5)
Sardegna	(7.7) 6.8	- 0.3	13.2		(15.6)
Molise	(3.7) 3.8	- 0.8	35.8		(44.2)
Basilicata	(2.8) 1.4	- 0.9	2.7		(15.1)
Sicilia	(3.6) 1.3	- 5.2	-2.7		(2.5)
Calabria	(1.7) -1.4	- 2.3	-9.1		(4.2)

Source ; M.D'Antonio (1977) p.1053.

ISTAT Annuario statistico italiano,1975 p.225.

<sup>§</sup> Figures in brackets relate to dependent employment only.

were both strongly negative, suggesting a weak industrial base especially when compared to the north west.

II.2. The effect of regional policy was not however spread evenly throughout the south<sup>1</sup>. As a percentage of 1971 employment levels, the residual effect was relatively low or negative for three of the southernmost regions - Basilicata,

<sup>1</sup> We assume that the residual component will broadly correspond to the employment impact of regional policy. This was certainly found to be the case in our study on France, although in the French case it should be recalled that there were also found to be a number of other factors which tended to pull in opposite directions.



Calabria and Sicilia.

One should however assess some of these results with care. The fact that Calabria recorded a negative residual effect may not, however, imply that the impact of regional policy was totally negative. It rather suggests that other factors were involved that have not been taken into account in the present survey. In particular, we know that in Calabria, firm size is on average very small even by southern standards, with 63.6% of manufacturing employment belonging to units of less than ten employees in 1971.<sup>1</sup>

We also know that overall, employment in firms of this size actually fell between 1961-71. Clearly, comparing industrial sectors as between regions will tend to give biased results when the size structure of these sectors differs appreciably. As a consequence, the structural component for some southern regions may be unduly favourable given the poorer than average structure of production units. This would then result in an underestimate of the impact of regional policy when based on the residual component. On the other hand, it is difficult to see how one could compensate for this effect. As a rough approximation, we may note that between 1961-71, the small-scale manufacturing sector (less than ten employees), lost around 37,000 jobs. By and large, other sectors in the south did not compare unfavourably with performance in the centre-north over this period. However, the small scale sector in the centre-north gained some 18,600 employees.

In other words, the firm-size disadvantage of the south may be estimated at around 43,200 jobs<sup>2</sup> over this period. If this disadvantage had remained unchanged over the period 1970-75, one might have expected a loss of around 21,600 jobs due to the size factor alone.

---

<sup>1</sup> See SVIMEZ (1973), pp.150,151. The corresponding figure for the south is 41.5%, and for the centre-north 20.5%.

<sup>2</sup>  $37,000 + [1/3 \times 18,600]$  - this sector in the South being one third the size of the same sector in the centre/north. The nature of this 'disadvantage' is not intrinsically related to small firms per se, but merely reflects their relative performance (for whatever reason) over the period of study.

One might therefore consider this figure to represent the degree of overestimation of the structural component, and obtain a new policy impact estimate of some 99,300 jobs.

Following from the abovementioned argument, one might perhaps consider the figures in brackets in table 1 (relating to dependent employment only)<sup>1</sup>, as giving a more accurate impression of the impact of regional policy as between regions. The reason for this is that taking only dependent employment clearly eliminates a number of very small craft or artisan enterprises ; that is, the small-scale sector which is relatively numerous in the South and which, for many years, has suffered more or less continuous decline. Thus, the firm size problem in the analysis is partially removed.

Comparing the two sets of figures in table 1, there are notable improvements in the residual components for Basilicata, Sicilia and Calabria -- three regions with very poor firm size structures. However, the results for Sicilia and Calabria still remain well below average. As concerns Basilicata, although the employment impact of regional policy now appears rather impressive, it should be remembered that, in relation to overall changes in manufacturing employment, the impact remains relatively small. This is due to the high rate of employment loss in small-scale firms.

The point to be emphasised, is that the overall employment position of many regions in the South has a considerable negative bias, not only because of a lack of growth industries, (vis.structural components), but also because of a disproportionate share of very-small-scale enterprises. Furthermore, the relative importance of these factors may be assumed to vary somewhat as between regions. Clearly, these are important elements to be taken into account where regional planning is concerned.

Table 2 gives the residual components for the most successful manufacturing sectors in the south. In absolute terms, the mechanical engineering and electronics sector appears to have provided the highest number of job creations as a direct result of regional policy. This result is similar to

---

<sup>1</sup> Note: this is also the approach used in our study of regional policy in France.

Table 2

Residual components for southern Italy 1970-75.

<u>Sector.</u>	<u>residual compon- ent, thousand jobs.</u>	<u>as % of empl.in relevant sector in south(1971).</u>
Mechanical engineering and electronics.	29.6	17.4
Transport equipment.	22.1	69.1
Textiles, clothing, leather.	18.1	12.2
Chemicals and pharmaceuticals.	8.6	18.0
Metallurgy.	9.1	27.7

---

Source ; M.D'Antonio (1977), p.1056.

SVIMEZ (1978), p.146.

our findings on French regional policy.

In relative terms (ie. as a % of 1971 employment levels), the effect is more marked in transport equipment and metallurgy. However, this is not surprising given that, (i) these sectors were both greatly under represented in the share of total manufacturing employment during the 1960's.<sup>1</sup> (ii) intervention in these sectors has largely been of the more direct type, as an integral part of national industrial policy and through the medium of existing state holding enterprises.

It should finally be noted that residuals for the remaining three industrial sectors (food and tobacco, printing and other industrial products), were all negative. Once again, this may be due to a particular structural disadvantage relating to the south. We shall discuss in more depth the particular productive structure of southern manufacturing sectors in a later section.

<sup>1</sup> ie South compared to the Centre/North. See Podbielski, (SVIMEZ 1978).

To give some idea of the employment impact of state enterprises at the sectoral level, Table 3 compares net employment changes overall and in state-holding enterprises for three employment sectors for which comparable figures are available.

Changes in dependent employment in southern Italy by sector, and changes in employment in state enterprise. Table 3.

<u>Sector.</u>	<u>Residual component ('000 empl.).</u>	<u>Net change in employment in South, ('000 empl.).</u>	<u>Residual as % of national growth rate.</u>	<u>Net change in state sector empl. in South ('000).</u>
Chemicals and Pharmaceuticals.	8.7	10.4	75.7 %	6.1
Mechanical engineering and electron.	30.1	34.3	42.8 %	29.0
Transport equipment.	22.6	24.2	135.3 %	----
Textiles, clothing, leather.	18.9	-4.4	(-)14.5 %	1.0 <sup>§</sup>
Metallurgy.	9.5	14.6	33.2 %	24.6
	(1)	(2)	(3)	(4)

§ textiles only. Sources : M.D'Antonio (1977), Relazione Programmatica, Ministero delle Partecipazioni Statali.

Note: The results of the shift-share analysis using dependent employment only, tend to confirm our hypothesis regarding firm size. Since this approach partially eliminates the smaller scale enterprises, the corresponding residual component is somewhat higher (85,800) than the figure for total employment, (77,700).

These figures are most easily interpreted by comparing columns one and three, and columns two and four. If we assume that the residual component broadly corresponds to the regional policy effect, then column 3 represents the extent to which regional policy has "transferred" jobs to the South. A figure over 100 % implies that the rest of the country has actually experienced a net decline in employment in the sector considered.

A comparison of columns 2 and 4 gives an idea of the importance of state sector employment in the growth of employment in the South. In the case of Metallurgy, it is clear that the

private sector must have lost around 10,000 jobs over this period. The state sector can therefore be said to have contributed fully to the growth of employment in metallurgy in the South. Another sector in which the state appears to have played a dominant role is mechanical engineering and electronics.

----- In this respect it particularly worrying that the private sector appears to have made only a minimal contribution to employment growth in these important sectors. However, in the electronics industry in particular, there would seem to be some scope for even greater state involvement. In terms of the proportion of state enterprise investment located in the South,<sup>1</sup> electronics (37.5%) comes well behind a number of other major sectors such as chemicals (60%), mechanical engineering (44.8%) and metallurgy (47.7%).

Furthermore, state enterprise employment in electronics is actually scheduled to fall by nearly 1,000 jobs by 1983, at least half of which will be lost in the Mezzogiorno.

Finally, around 42.6 % of all new investment by state-owned enterprises is planned to be located in the South between 1979 and 1983. However, the rate of job creation is likely to be much reduced -- only around 9,700 new jobs were scheduled to be created in manufacturing in the South between 1976 and 1981. This compares with a figure of 67,400<sup>2</sup> for the period 1970-75.

Although the growth industries at a national level over the period 1970-75 can easily be spotted -- electronics 19.8%, metallurgy 16.4%, transport eq. 10.3%, chemicals & pharm. 9.1% -- the situation is much different for the period 1975-79. The only industrial sectors with growth rates of any significance over this later period were, transport equipment 4.8%, metallurgy 4.6% and machinery 2.5%.<sup>3</sup> In this perspective, studies on regional policy up to 1975 must seem like past history. Clearly there is now very little possibility of repeating the substantial redistribution of industrial employment that occurred up until 1974/75.

Furthermore, as we have seen, in the past such redistribution took place mainly, and in some cases almost entirely (metallurgy and mech. engineering) through state-holding enterprises.

<sup>1</sup> Provisional figures for 1979-81. Ministero delle Part. Stat., Relazioni 1980.

<sup>2</sup> Op.cit. 1978, p71. This figure does not include "various man.", which is aggregated with "various services" in the earlier statistics. At a guess about another 4,000 jobs could be added to this figure.

<sup>3</sup> ISTAT, Bollettino Mensile di Statistica, 1980 No. 4, p.308.

The future for industrial employment in the South would therefore seem to depend critically on the role that the state is willing to play in the 1980's. It is therefore important to analyse such recent developments, and this will be done in the chapters that follow.

Table 4 gives a breakdown of investments receiving capital grants and a comparison with the policy impact by sector. As with the French survey, the actual policy impact is generally lower (around one half) than the official job creation estimates.

Table 4.

Investments receiving capital grants and estimated regional impact.

<u>Sector.</u>	<u>regional policy estimate.</u>	<u>jobs subsidised('69-75).</u>	<u>capital per employed(million lire).</u>
Mech.engin.&electronics.	29,600		
Transport equipment.	22,100	116,200	9.5
Textiles/cloth./leather.	18,100	16,700	2.9
Metallurgy.	9,100	29,300	60.8
Chemicals & pharmac.	8,600	26,800	52.9
(Food & tobacco).	- 800*	39,800	12.5

\* This result suggests that there was probably a separate "southern factor" involved. One explanation is certainly the poorer than average size structure of this industry in the south.

Source; SVIMEZ (1978), p.157 and M.D'Antonio op.cit. table 2.

The textiles sector is again an exception where the two figures broadly coincide.

The general interpretation of the above table is that around one half of the jobs subsidised would have been created anyway. This is somewhat better than the corresponding French figure of over 60 %.

In terms of capital per employee (investment per job created), chemicals and metallurgy are clearly much more capital intensive than the other sectors - the investment required to provide a job in these sectors being around six times the figure required for a job in mechanical engineering/electronics.

Finally, table 5 gives the distribution of aided jobs and investment between new plants and the extension of existing enterprises.

Table 5.

Projects receiving grants in the industrial sector, 1969-1975.

	<u>N° initiatives</u>	<u>Emolovment</u>	<u>Investment</u>	<u>R/L</u>
<u>New plants.</u>	4,757	213,592	L.2,992 b.	14.0
<u>Enlargements.</u>	4,562	135,910	L.3,467 b.	25.5
total = 349,502				

Source ; Cassa per il Mezzogiorno, Bilancio 1975.

Clearly, new plants were in general more labour intensive, and as a whole constituted around two thirds of the total number of jobs aided. Hence it would seem that Italian policy was probably more successful in attracting new firms to the development areas than was the case in France where some two thirds of regional development grants went towards the extension of existing enterprises. However, in the Italian case it is probable that many of these 'new' firms were in actual fact state enterprises.

III. The role of the State and state-controlled enterprise in regional development.

Italy :

Italy is perhaps one of the only countries in Europe where state-owned enterprise has played such a considerable role in attaining the overall goals of regional development policy. Italy's major state-holding enterprises were not however set up with this aim specifically in mind - the largest group, Iri, started its life in 1933 under Mussolini as part of a propping-up operation in the banking and industrial sectors.

Under 1971 legislation, the state-holding sector was obliged to locate 80% of its new, and 60% of its total investment in the south. Although actual investment fell somewhat short of these targets, the impact was still considerable - on average, between 1971-75, investment by state enterprises represented 37% of total investment in the south<sup>1</sup>.

The state-holding sector in Italy essentially comprises two main companies, the Iri and the Eni, which in 1977 employed some 524,000 and 103,000 persons respectively.<sup>2</sup> Both companies have very wide ranging interests. The Iri for example has interests in Alitalia, Alfa-Romeo, broadcasting, most motorways, banks, iron, steel, engineering, shipbuilding, electronics and public works. The Eni group deals mainly in chemicals, textiles, energy and construction. Another smaller company, Efim, also has interests in the food and tobacco industries, hotels and engineering.

---

<sup>1</sup> SVIMEZ (1978), p.160.

<sup>2</sup> The Economist, 30th.December 1978.



From 1970 to 1975 employment in the industrial sector of state-holding enterprises in the south increased by almost 13,000 jobs per year. In the five years 1970-75, the net increase came to around 67,400 jobs. Given that over the same period manufacturing employment in the south rose by some 82,300 jobs, it is quite clear that the state sector played an important role in the growth of industrial investment and employment in southern Italy.<sup>1</sup>

France :

In France the only major industrial companies with over 50% state ownership are : (i) Renault (243,000 employees in 1977), (ii) Elf-Aquitaine (37,000), and (iii) Electricite de France (101,000). Of these only Renault is of major interest as far as manufacturing employment is concerned. Of eight major Renault extensions outside the Paris region between 1960-74, only one was situated in a class 1 D.A. (Bretagne), and only two in a class 2 D.A. (Loire). Three were located in the Nord region (D.A. class 3) and two were located in Hte. Normandie (unclassified).<sup>2</sup> Although there was clearly some effort to decentralise towards the west, the attempt appeared somewhat half-hearted, and the residual growth components for this sector in Loire and Bretagne (see table 5.) remained relatively low after 1967.

As in many other countries, regional development aid in France constitutes only a small part of total state aid to industry. In France, however, it is particularly difficult to fathom the precise nature and extent of national aid - until a law, removing administrative secrets was passed in July 1978, there was little possibility of obtaining the relevant figures.

---

<sup>1</sup> Dependent manufacturing employment rose by 109,500 jobs. Source: Minist. delle Part. Stat. 1977, M.D'Antonio, op.cit.

<sup>2</sup> p. Durand (1974), p. 203.

From what can be gathered<sup>1</sup>, state aid to industry in France during the 1970s was very substantial. The aids fell mainly in the following categories: research and development aid, export aids, regional development grants, fiscal aids, sectoral aids. Between 1973 and 1976 total aid amounted to Fr. 33,360 million or Fr. 8,340 per annum (around  $\pm$  725m). Expenditure on regional subsidies averaged about Fr. 450m per annum over this period, and therefore accounted for only 5.4% of total aid to industry.

Almost two thirds of this aid is centred in three industrial sectors, the aircraft industry (36.6%), electronics and communications (15.1%), and shipbuilding (11.5%).

However, aid to investment was very low -- depending on the sector considered, it amounted to between 1% and 6% of total state aid. It is probable therefore, that regional investment aid accounted for a very large share of direct aid to investment. The other types of aid may in general be considered to have had a much smaller impact on new investment and employment. Very often these aids were aimed directly at improving the profitability or competitiveness of large companies in key sectors. For example, "financial aid to research at Thomson is renewed yearly with a remarkable regularity and has tended to become an indispensable factor in maintaining the profitability of this enterprise." <sup>2</sup>

R&D costs have, in certain cases, been financed at up to 90%, and in the case of export subsidies, these have sometimes reached a cumulative total of as much as 20%-30% of the agreed export price.

In conclusion, there seems to be little evidence, for France, of direct state involvement in achieving the aims of regional development. Clearly the means at the disposal of the French government were nowhere near as powerful as those we have reviewed in the Italian case. It should however be recalled that the state has traditionally played a major role

---

<sup>1</sup>The report of H. Hannoun on state aid to industry, taken from suppléments aux dossiers et documents du Monde (Le Monde) Jan. 1980, p. 151.

<sup>2</sup> Ibid. p. 151.

in the overall scheme of industrial growth in Italy, and it was only one more step to apply these methods for the purposes of regional development. Clearly, if no such large scale state enterprises already exist, it is quite another matter to create them for these purposes. The alternative is an array of state-aids to existing private enterprises. A good example of this is found in the U.K. where, quite apart from specific regional aids, state-aid to industry amounted to some £ 2,822 m. over the period 1972-79 <sup>1</sup>, (by far the greatest part of which took place after 1975 ). This compares with expenditure on regional grants and loans amounting to some £ 1,819m. over the same period.

In the Italian case one might also add to the cost of industrial policy the sizeable losses of the various state-controlled enterprises over recent years.<sup>2</sup>

Certainly, it is becoming increasingly difficult to fathom the actual cost of industrial policies in many E.C. member states. Furthermore, the dividing line between regional policies, sectoral policies and employment maintenance programmes is becoming increasingly vague.

#### IV. Summary and conclusions

Table 6 gives a comparison of the costs per job created in the three countries covered so far. By and large, expenditure on regional policy has been made broadly comparable, and has been expressed in terms of sterling at values measured in, or equivalent to price levels around 1970-71. The job creation figures are taken from the aforementioned studies, and relate to estimated policy impact rather than official figures on jobs aided. All expenditure figures concern direct aids to

---

<sup>1</sup> Department of Industry aid administered under 1972 Industry Act, and employment aid administered under the 1975 Employment Protection, 1978 Employment Subsidies and other acts. Of this figure, some 53.5% went to industrial subsidies, the remainder going to various employment maintenance and training schemes.

<sup>2</sup> In 1976/77 the Iri lost around \$ 1,300 million, and the state put in some \$ 450 m.. By 1978 the Iri was asking for a further \$ 1,150. The Economist 30th. December 1978.

Table 6.

An overall comparison of the impact of regional policies.<sup>§</sup>

<u>Country</u>	<u>period covered</u>	<u>estimated r.p. jobs per year</u> <u>impact.*</u>	<u>cost per year</u> <u>£ million.</u>	<u>cost per</u> <u>job created.</u>
<u>France</u>	1967-74	103,900 <sup>a</sup>	£25.6 <sup>d</sup>	£1,725
<u>U.K.</u>	1968-73	89,600 <sup>b</sup>	£237.4 <sup>e</sup>	£13,260
<u>Italy</u>	1970-75	99,300 <sup>c</sup>	£550.0 <sup>f</sup>	£27,694

\* Direct effect only. Does not include multiplier effects on other sectors.

a) See text - residual component only.

b) Residual component + fitted time trend from policy-off period.

c) Residual component + correction for overestimate of growth component due to differences in firm size structure.

d) Current prices. e) Constant 1970-71 prices. f) Constant 1971 prices. (including expenditure on industrial infrastructure).

regional development (ie incentive spending).

Very substantial variations appear in the average cost per job created,<sup>1</sup> with France appearing to have the most cost effective policy.

However, regional policies in Britain and Italy are far more comprehensive than those operating in France. Over the periods covered, these two countries were also employing labour subsidies which accounted for a very large share of total incentive expenditure (41% in the U.K. and around 49% in Italy).<sup>2</sup> Clearly, as the national job creation target

<sup>§</sup> For sources see present text and Chapter 8. For an alternative view of the cost of regional policy, see, E.C. "The Regional Development Programmes", 1979, p.242.

<sup>1</sup> This is not to be confused with net Exchequer costs; for a discussion of transfer and resource costs see Annex.

<sup>2</sup> The cost of social security concessions in Italy came to Lire 225 billion in 1972, Lire 701 b. in 1975 and over 1,000 billion in 1977, (Ronzani 1979).

rises, so it becomes necessary to provide more comprehensive policies, and this obviously entails a rise in the overall cost and the average cost per job created.<sup>1</sup>

As we have seen, the conditions under which regional policy had to operate were very different in the three countries considered. In France, the general economic climate was very favourable and a trend of decentralising industry away from the Paris region had already begun.

In Britain, manufacturing employment fell at the national level over this period. This resulted in there being relatively less new manufacturing employment to attract to the development areas.

In Italy, although employment growth rates at a national level were generally favourable, the problem of attracting new investment to the D.A.'s was probably greater than in France or Britain, arising mainly from (a) generally backward industrial and commercial structures, (b) rising relative wage costs, (c) lack of industrial infrastructure, (d) distance costs from the central markets. The aim of providing southern Italy with a series of heavy basic industries undoubtedly added greatly to the overall expense.

Typically, these industries were highly capital intensive - investment per employee being in the region of some £ 40,000.<sup>2</sup> For a medium size project in a priority sector and location the effective value of grants, tax concessions and loans could well be over 40% of initial capital costs, or some £ 16,000 in the above case.

---

<sup>1</sup> Although labor subsidies by and large cover all workers employed and not just additional units, there is a good case for including these expenditures in our overall cost estimates. To the extent that labour subsidies maintain employment levels above that which might otherwise have been the case, their impact is therefore included in the residual component, and as such in the regional policy impact estimate.

<sup>2</sup> Podbielski (1973), p.157.



## Conclusions

Clearly it is difficult to make direct comparisons of the impact of regional policies where the surrounding circumstances and policy aims themselves differ greatly from country to country. Whilst this would seem to have largely been the case in the present context, a number of general points in common would appear to be fairly clear.

1. In the first place, there would appear to be substantial difference between official figures on new jobs aided by regional incentives and actual job creation - the difference arising due to the fact that the incidence of regional aids on location and investment decisions may vary substantially from incentive to incentive and from country to country. Whilst the figures for Italy would suggest that around one half of new aided employment would probably have occurred anyway, that is in the absence of regional incentives, the results for France would suggest a somewhat lower 'incidence' of around 40%. To some extent, this is to be expected given the much higher incentive values obtainable in Italy, and the major role played by state-holding enterprises in this country.

2. With respect to labour subsidies, the main criticisms raised in the previous chapter would appear to have been given some empirical confirmation. It is certainly the case for example that labour subsidies in Italy and the U.K. have greatly increased the cost of regional policy in these countries relative to elsewhere. One may feel inclined to ask on the basis of table 7 whether such expenditure has really produced much better results.

3. Perhaps the most important conclusions to be drawn from our analysis concern the spatial effectiveness of regional incentives. In particular our surveys on France and Italy have shown that several regions appear to have benefitted little, or not at all from these policies ( Limousin, Languedoc and Nord in France; Basilicata, Sicilia and Calabria in Italy). That most of

the abovementioned regions are also those with some of the gravest economic and social problems in Europe is of even more concern. In order to improve the net financial advantage available to firms which may consider locating in more disadvantaged and less developed areas, it is clearly necessary to achieve a much higher level of spatial selectivity than is the case at present. Moreover, the degree of structural disadvantage in such areas (see tab.3 France, and tab.1 Italy), would suggest a further need to develop specific policies to improve indigenous firm performance and adjustment potential. If, as we have suggested earlier, industrial investment is likely to be much less 'mobile' over the 1980's than was the case for the 1970's, then policies must place correspondingly more emphasis on achieving a greater degree of 'self-help' and rely less on the movement of what are often mere production 'workbenches' to the less developed areas. In respect to the latter question, a higher degree of sectoral selectivity towards new enterprises locating in l.d.r.'s is probably desirable.

The case for development of such a 'two-tier' approach towards regional policy is given further backing by the observation that much of the new job creation in l.d.r.'s has come from what are essentially new industries to these regions (eg. mech./elec. engin. in France and transport equip. as well in Italy), whilst in many cases more traditional consumer industries (wood, clothing, textiles, vis France) have fared less well in comparison with other regions. As evidence from other studies would suggest, it cannot be taken for granted that the implantation of new industries in less developed regions will necessarily produce significant and positive multiplier effects on the indigenous firm sector. Indeed the outcome may be quite the reverse.<sup>1</sup>

---

<sup>1</sup> On this point the concluding remarks of an Italian study on the induced employment effects of new industrial implantations (1961-71) in the South of Italy are worth quoting in full :

" La correlazione con l'indotto dei beni di consumo, che per tutto il Mezzogiorno era nulla, nelle Area di sviluppo industriale diventa addirittura negativa..... Gli effetti distruttivi risultano di questa correlazione in maniera evidente: ci si trova di fronte a questa contraddizione...che proprio là nelle Area di sviluppo dove maggiori sono gli investimenti produttivi



Under the present depressed economic conditions of the 1980's, there will undoubtedly be a greater call for national policies at the micro level to deal with the growing problem of widespread unemployment. Certainly the regional implications of such policies will have to be assessed with care if the net advantage conferred on the less developed regions is not to be substantially reduced.

Moreover, one of the economic justifications for regional policy insofar as it relied upon the desirability of avoiding inflationary pressures set up in more central 'full-employment' regions is likely to come under increasing attack as unemployment rises in many of the old-established industrial centres. The precise reasoning behind a policy which may then appear to promote some regions at the 'expense' of others should therefore be made more explicit. In this respect a greater degree of spatial selectivity would seem to be called for, and the criteria by which aided regions are defined should perhaps place as much emphasis on welfare considerations (see Chs.1&2) as on more traditional measures of structural disadvantage and unemployment.

---

cont/

e dove quindi più dovrebbe aumentare la domanda e la produzione indotta di beni di consumo, viceversa si ha un declino più accentuato di questa industria. Gli investimenti autonomi che sono avvenuti.... quasi esclusivamente nel settore di beni strumentali hanno indotto attraverso l'incremento della domanda, anziché un aumento nella produzione di beni di consumo, un aumento di importazione dei prodotti del centro-nord che, trovandosi sul mercato concorrenziale in posizione di netto vantaggio... hanno provocato la crisi e quindi l'uscita del mercato delle industrie locali preesistenti del settore dei beni di consumo".

From "Occupazione autonoma e occupazione indotta nell'industria meridionale", by F.Balsamo & G.GriAUDI, in Graziani & Pugliese (1979), pp.338/9.

The technique used in this study is for example similar to that used by Moore and Rhodes (1973)<sup>1</sup>. It varies slightly from the standard shift-share approach where the regional industrial weighting is continually adjusted - that is, the yearly estimates of the growth components are computed on the basis of regional weights in the preceding year.

In the present study, regional (expected) employment in 1974 is calculated on the basis of industrial structure in 1967. In other words, constant regional weights are used. This method is analytically equivalent to the Moore and Rhodes approach, although the results obtained are in the form of overall figures instead of a year by year series as obtained by the above-mentioned authors.

On the other hand, it is worth noting that the results obtained using constant regional weights are likely to be slightly different from the standard shift-share approach. In particular, for industries growing consistently faster at the regional level than at the national level, the fact that the standardisation is not continuously adjusted will lead to an 'underestimate' of the structural component (or expected level of employment), and an 'overestimate' of the residual component. On the other hand, for industries which have slower growth rates at the regional level than at the national level, for individual regions, the residual component will be more negative than the results obtained by standard shift-share analysis.<sup>2</sup>

However, the size of these discrepancies is likely to be very small, especially over such a short time period. Moreover, it is not clear whether, overall, or for any individual region the tendency will be to over or under-estimate the regional policy impact. All we can say is that any such tendency will be of minimal importance for the purposes of our analysis.<sup>3</sup>

---

<sup>1</sup> B. Moore and J. Rhodes, "Evaluating the effects of British regional policy", E.J. 1973 vol.83, pp.87-101. See also Vanhove and Klassen (1980), pp.90-96.

<sup>2</sup> It should however be noted that the continuous weighting system may tend to underestimate the residual component where the main regional policy impact is felt at the start of the study period and/or employment build-up occurs mainly in the early years. Hence it is possible for example that a negative residual could actually be produced for a sector, where, to all intents and purposes, actual employment at the end of the study period is equivalent to expected employment (over the whole period) on the basis of national growth figures.

<sup>3</sup> In the special case where national employment growth is zero over the whole period, the two methods will in fact yield identical results.

Annex 2.

It is important to differentiate between expenditure on regional policy and the net costs to the government. One interesting estimate of the latter has been made by Moore and Rhodes, (1974), for the British case, and the results are shown below. First of all, it is interesting to note that high levels of expenditure on regional policy can actually produce a net gain to the government. Line A gives the net expenditure on regional incentives. However, the cost to the exchequer is reduced due to higher tax receipts and lower social security payments as a result of the creation of some 220,000 jobs in the development areas over the period in question, (see line B.).

The Exchequer implications of British regional policy, 1963-70, annual averages, £ million at current prices.

Cash Flows	£m	£m
A. <u>Exchequer outlays on regional incentives net of directly recoverable items</u>		-125
B. <u>Exchequer 'clawbacks' from regional policy:</u> <sup>1,2.</sup>		
(i) Employers' and employees' national insurance contributions	20 to 23	
(ii) Corporation tax	25 to 28	
(iii) Tax on distributed profits	5 to 6	
(iv) Income tax	29 to 34	
(v) Indirect taxes	35 to 40	
(vi) Reduction in unemployment benefits national assistance and supplementary benefit payments	<u>18 to 26</u>	+133 to +156
C. Net reduction in infrastructure expenditure and services		+20 to +6
D. Reduction of taxes required to restore pressure of demand		-122 to -133
E. Net increase (-) or decrease (+) in budget deficit		-94 to -96

1. The 'clawback' estimates show the position once the pressure of demand has been restored in the fully-employed areas.
2. The range of estimates given reflects different assumptions about the effect of regional policy on net outward migration from the DAs. The lower 'clawback' estimates assume that regional policy reduced migration by 100,000 workers (or 300,000 people), and the higher estimates assume that migration was reduced by 33,000 workers (or 100,000 people). This also applies to line D, while the reverse applies to line C.

It is important to note that we are assuming that the regional policy estimate represents a net addition to total employment and not merely a redistribution of jobs to the development areas. In other words it is assumed that the government will restore the pressure of demand in the "fully-employed" areas where the jobs originated, and that the overall level of unemployment will therefore be lowered. As we shall see, this is by no means certain.

Obviously, the extent to which the government will need to restore the level of demand in the low-unemployment regions will depend on the extent to which inter-regional migration is reduced as a result of regional policy. The less migration is reduced the greater will be the required stimulus to maintain pressure of demand in the low-unemployment regions. As a result, overall levels of income and employment will be higher and so will the exchequer clawbacks. However, the final estimates of the required budget deficit/surplus, do not appear to be very sensitive to the migration estimates chosen.

In line C, it is assumed that the exchequer will receive further savings from the fact that reduced inter-regional migration will tend to reduce the need for public infra-structure and service expenditure.

Taking lines A,B and C together, the net gain to the government comes to between £28m. and £37m. per annum. In order to restore the pressure of demand in the "fully-employed" regions that have lost jobs as a result of regional policy, the government must reduce taxes to the value of between £94m. and £96m..

It should be noted however, that this figure merely represents the transfer cost to the government, and not the resource cost to the nation. For example, it does not take into account the extra income for firms and households generated by the reduction in tax rates.

A final point to be made is that on purely theoretical grounds, there is certainly a case to be made for Moore and Rhodes argument that the jobs attributable to regional policy always constitute a net increase in employment. This assumption is basically equivalent to saying that the high-unemployment regions have no weight in determining the national rate of infl-

-ation. This type of result will obtain if, for example, wage inflation is determined in the low-unemployment regions and transmitted at the sectoral level to the high-unemployment regions, ( as outlined for example by Mackay and Hart, 1975<sup>1</sup>). On the other hand, if the government uses the national unemployment rate to determine the target pressure of demand, as Moore and Rhodes actually concede, it is not clear that there will be any call to restore the pressure of demand. In this case, regional policy will only have achieved a diversion of jobs to the D.A.'s with no net employment gain at the national level. However it will have achieved a lowering in the overall rate of inflation since unemployment will have risen in the fully-employed regions with tight labour markets.

The general conclusion we have come to is that expenditure on regional policy must not be assessed at face value. If cost-benefit studies are anything to go by (see Schofield 1976)<sup>2</sup>, then we have good support for the argument that regional policy in Britain produced a significant surplus during the 1960's.

It is quite clear therefore that the above remarks should be borne in mind , especially when assessing our expenditure figures in table 6.

---

<sup>1</sup> " Wage inflation and the regional wage structure", in Contemporary issues in economics. Parkin and Nobay (eds.). 1975.

<sup>2</sup> "Economic efficiency and regional policy in Britain", Urban studies, vol 13, 1976.

## BIBLIOGRAPHY

- K.Allen and M.Maclennan (1970), Regional problems and policies in Italy and France. London.
- Projet de loi de finances, various years. Paris, Imprimerie National.
- MacDougal Report (1977), Commission of the E.C..Bruxelles.
- Journal Officiel de la Republique Francaise, various. Paris.
- Economie et Statistiques, various. INSEE, Paris.
- Statistiques et indicateurs des regions francaises, various. INSEE.
- R.Dixon and A.Thirlwall (1975), Regional growth and employment in the U.K.. London.
- D.A.T.A.R. (1974), Investissements etrangers et aménagement du territoire, Delegation a l'aménagement du territoire et a l'action regional (DATAR), Paris
- L'emploi salarie par région, various. INSEE, Paris.
- B.Moore and J.Rhodes (1973), Evaluating the effects of British regional policy, E.J., Vol.83.
- R.MacKay and L.Thomson (1979), Important trends in regional policy and regional employment, S.J.P.E., Nov..
- B.Ashcroft and J.Taylor (1979), The effect of regional policy on the movement of industry in G.B., in Regional Policy, ed. D.Maclennan & J.Parr. Oxford.
- P.Townroe (1972), Some behavioural considerations in the industrial location decision. Journal of Regional Studies.
- D.Maclennan and J.Parr (1979), Regional policy; past experiences and new directions. Oxford.
- P.Lund (1976), article in The economics of industrial subsidies. HMSO.
- M. D'Antonio (1977), La diffusione delle industrie manifatturiere nel Mezzogiorno, 1970-75, in Rassegna Economica, No.4, 1977, pp. 1045-80. Also in, Struttura economica, stabilita e sviluppo del Mezzogiorno, Napoli, 1979.
- SVIMEZ (1978), 25 years of special action for the development of Southern Italy, by G.Podbielski, Associazione per lo sviluppo dell'industria nel Mezzogiorno.
- Ministero delle Partecipazioni Statali, Relazioni Programmatica, Various. Rome.

- S.Ronzani (1979), article in Balanced National Growth, ed.K.Allen, Lexington.
- S.Ronzani (1980), article in Regional policy in the E.C., eds. K.Allen et al. London.
- Cassa per il Mezzogiorno, Bilancio 1975. Rome.
- The Economist, 30th. December 1978.
- P.Durand (1974), L'industrie et regions. La Documentation Francaise.
- Le Monde, January 1980.
- N.Vanhove and L.Klassen (1980), Regional policy; a european approach. Saxon House.
- B.Moore and J.Rhodes (1974), The effects of regional policy in the U.K., in Regional policy and planning for europe, ed. M.Sant. Saxon House.
- MacKay and Hart (1975), Wage inflation and the regional wage structure, in Contemporary issues in economics, eds. Parkin and Nobay.
- Schofield (1976), Economic efficiency and regional policy in Britain. Urban Studies, Vol.13.

J.O. = Journal Officiel de la Republic Francaise.

D.A.T.A.R. = Delegation a l'amenagement du territoire et a l'action regionale.

E & S = Economie et Statistique. Published by the Institut national de la statistique et des etudes economique, INSEE.





P A R T F I V EC H A P T E R T E NEUROPEAN INTEGRATION AND  
REGIONAL DEVELOPMENT.Chapter 10 :

10.1.	<u>European Monetary Integration and the Regions - the issues involved</u>	p. 467
10.1.1.	The framework of analysis	p. 468
2.	Optimum currency areas	p. 470
3.	The role of factor mobility	p. 473
4.	The role of exchange-rate flexibility	p. 478
5.	The monetarist approach to the balance of payments	p. 482
6.	Growth, technological change and the balance of payments	p. 485
7.	An extension of the Fleming/Corden theory	p. 486
8.	Conclusions	p. 491
10.2.	<u>European Monetary Integration and the E.M.S.</u>	p. 494
10.3.1.	Strategies for regional harmonisation; the alternatives reconsidered - alternative transfer systems	p. 500
10.3.2.	The role of budgetary transfers and public finance in European integration	p. 503
10.4.	<u>The role of European Community Funds</u>	p. 510
10.4.1.	The European Regional Development Fund	p. 513
2.	The European Investment Bank	p. 515
3.	The European Social Fund	p. 518
4.	The Common Agricultural Policy	p. 522
5.	The EAGGF Guidance budget and expenditure	p. 528
6.	Conclusions : some general remarks on the funds and proposals for reform	p. 533

BIBLIOGRAPHY p. 540

GENERAL CONCLUSIONS p. 543



## CHAPTER 10. European Monetary Integration and the regions

### Introduction

In this chapter we shall summarize some of the major regional implications of monetary union. Since such union implies either permanently fixed exchange rates or a common currency, we must first of all examine whether the inability to alter exchange rates involves any real loss for certain types of countries or regions.

Some of the questions we shall deal with in the course of this chapter are, in a sense common to both customs unions and monetary unions. They mainly involve problems relating to destabilising factor mobility and regional competitiveness. However, where exchange rates are fixed, so are the terms on which a country engages in international trade and adjustment problems may prove more difficult. In particular we propose to outline the possible "costs" of maintaining fixed exchange rates, and examine the role of (intra-Community) transfers in providing a solution.

One could argue that the costs of monetary union should be weighed against the benefits. In their enthusiasm to point out the benefits, some authors have been decidedly vague over the costs involved<sup>1</sup>. This type of analysis usually follows from the simple proposition that exchange rates are largely irrelevant<sup>2</sup>.

Although one would generally agree with the contention that monetary union is likely to bring some types of benefit (in the form of dispensing with non-productive activities such as exchanging Marks for Francs, reducing the volumes of money inventories of firms and banks, and removing the variability of rates of return on capital investment) given the diversity and large number of factors to be considered, there

<sup>1</sup>e.g. Parkin M. (1972), p. 1142. "The gains could be enormous. There are no losses to be offset against them" or again "If the focus of attention in the transition is on the equalisation of inflation rates, the rest is detail."

<sup>2</sup>Ibid.

is no easy measure by which one can actually compare benefits with costs.

The above discussion of course begs the question of whether a policy trade-off is possible to compensate net losers in this process, or at least to create the necessary preconditions for E.M.U. to be achieved. The budgetary implications are therefore examined, both with respect to the present state of affairs (EMS) and with a view to an increased role for public finance and budgetary transfers in facilitating the integration process. Finally, we shall attempt a brief review of present funds and make an assessment of the scope and possibilities for their enlargement or adaptation.

#### 10.1.1.

In this section 10.1. we shall review some of the major early contributions to the "theory" of monetary integration. This involves examining the theory of optimum currency areas, the role of factor mobility, and the determination of internal regional balance under floating and fixed exchange rates.

#### The framework of analysis

What type of integration are we talking about? Following Corden's<sup>1</sup> analysis, we may distinguish two essential components of monetary integration. The first is exchange-rate union, this implies that exchange rates between members are permanently fixed in relation to each other, but may vary, taken together, relative to non-union currencies. The second component is capital-market integration that is the freedom of capital movements and remittances, and requires the harmonisation of legal and fiscal arrangements with respect to investment and profits.

---

<sup>1</sup>W.M. Corden, 1972.

A further distinction we must make in our analysis is between pseudo and complete exchange rate unions. In the former there is a formal commitment to maintain fixed exchange rates within the union but no common pool of foreign exchange reserves and the individual member states are free to determine their own money supply or credit policies -- in so far as this is possible or consistent with the aim of maintaining fixed exchange rates.

As an extension of the former arrangement we could include the present E.M.F. proposals whereby deficit countries would obtain short and medium term credit from a common fund. This would give countries more time to introduce restrictive monetary and fiscal policies consistent with the prevailing exchange rate.

In a complete exchange-rate union we would have a complete pooling of foreign exchange reserves. It is easy to see that such a move is only practical where a central monetary authority is also set up. Unless this is done, deficit countries could engage in as much domestic credit expansion as they wished, which would be financed from the reserves of the surplus countries.

For this, agreement would have to be reached on economic policy coordination, or, ultimately, a Community central bank could be established which would have the sole right to create money within the union. The main difference between the two would be a certain element of finality involved in the latter solution.

From a conceptual point of view, this gives us essentially two possible methods of analysis of economic and monetary union within the European context. If we consider E.M.U. in its fullest sense -- one common money and one common bank -- we may then view the answers to resulting disequilibria in terms of effective regional policies, improving regional industrial structures and exports, and social policies affecting the internal mobility of the labour force. Since no country

or region is individually constrained by exchange rate considerations, it could conceivably be running a "deficit" for much longer than would be possible if such constraints existed. In other words, we are arguing that the notion of transfers within such a union would be fundamentally different from repayable reserve transfers that would be entailed by mere fixity of exchange rates. In a sense the main question revolves around whether centrally determined policies can provide a good substitute for exchange rate adjustment and hence reduce the costs of monetary integration for the less developed regions.

#### 10.1.2.

At this stage, however, it is worthwhile to examine the role of factor mobility and the concept of "optimum currency areas", as put forward by Mundell(1961). The idea that factor mobility could serve to reduce the disequilibria arising from a "free-trade area", had been set out a few years earlier (J.Meade 1956).

According to Mundell, an optimal currency area has the characteristics of high internal factor mobility and low external factor mobility. If the world could be divided into such regions then "each of these regions should have a separate currency which fluctuates relative to all other currencies"<sup>1</sup>. Hence, it might be more advisable to establish currency areas within existing countries rather than getting a group of countries to form a currency area.

The central point in Mundell's analysis is that labour flows are seen as a substitute for parity changes and bring about the realignment of real wage levels due to changing demand and supply conditions.

In the context of the E.C., however, there are some serious doubts as to whether such a process could in fact be envisaged. More fundamental still, it is even debatable whether such an equilibrating process is desirable due to the the "social" costs attached to labour mobility, particularly since this may be called for on a rather large scale.

---

<sup>1</sup>Mundell(1961), p. 663.

One other consideration should perhaps be mentioned in this context. Although labour mobility within the union may be low, this might not be the case with regard to non-member countries. Cordon<sup>1</sup>, for example, has argued that a large movement of temporary workers from outside the Community might reduce the internal balance problem and the cost of fixing exchange rates. He assumes that "a country which deflates takes in fewer new migrants and sends some home, while the country that expands demand takes in more ...". Of course, the existence of an elastic supply of foreign workers in the expanding economy will permit a lower rate of increase of the real wage -- this however is little comfort for the contracting countries if they cannot avail themselves of the flexibility of sending home large numbers of unemployed migrant workers. Furthermore, the supply of migrant workers to the expanding economy will tend to increase its rate of growth without any inflationary consequences. The competitive position of the region would improve and this could entail further deflation in the contracting economies.

If we assume limited labour mobility within the union then the possible consequences may be even more serious. If labour within the union is less mobile than labour outside the union (due for example to higher real wage differentials in the latter), the equilibrating movement of labour between member countries would be largely impeded.

Some further limitations of the "mobility" theory could perhaps be mentioned. Presley (1976) has suggested that the increased demand for factors in B, may not be sufficient to absorb the unemployed factors in A. This would occur if, for example, the declining industries in A were labour intensive whilst the expanding industries in B were capital intensive. The net result may be a transfer of savings to B and persistent labour unemployment in A, given wage inflexibility in the latter.

---

<sup>1</sup>W. Corden (1972), p. 16.

Returning once more to the desirability of large-scale labour mobility, the declining areas may be faced with an additional and serious problem. In order to maintain a given standard of social services, regions would need to have higher central government transfers or a higher rate of local taxation. Recourse to the former may tend to increase the overall level of government spending. Increasing local taxation may have the undesired effect of increasing outward migration still further. On the other hand a decline in regional social services would result in increasing spatial disparities in the quality of social infrastructure and the area would become less attractive for both workers and industrialists.

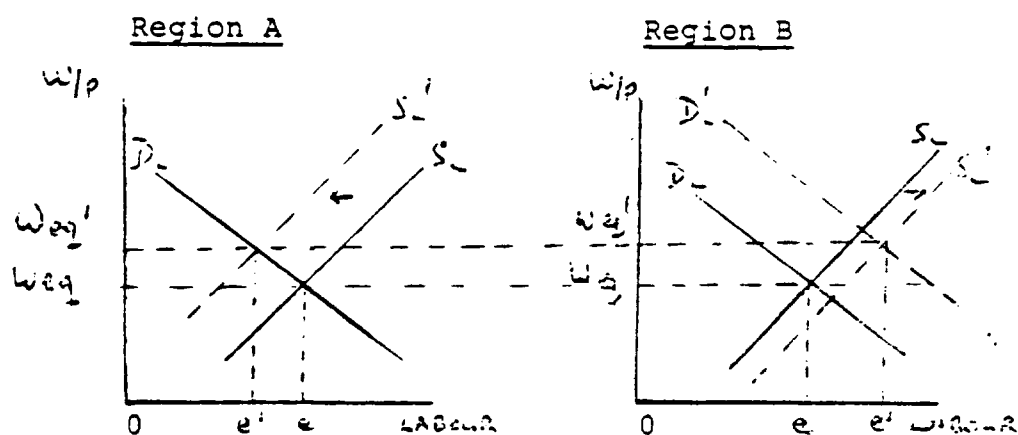


### 10.1.3. The role of factor mobility

From our preceding discussion it should be clear that factor mobility may be an important point to examine when considering the appropriateness of joining two or more countries in an economic and monetary union.

Under the simple classical theory of migration, labour would move from low-wage regions to high-wage regions, whilst capital would tend to move in the opposite direction. The situation we analysed in the previous section is illustrated graphically in Figure 1:

FIGURE 1



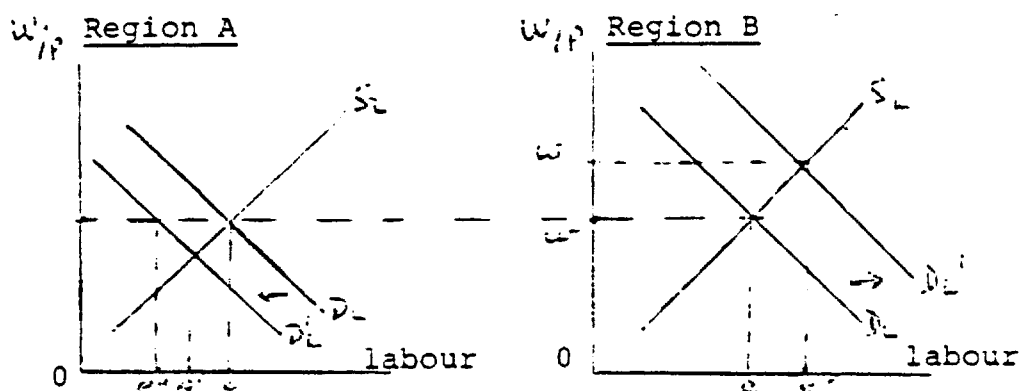
An increase in demand for region B's exports leads to an increase in the demand for labour in B (from  $D_L$  to  $D'_L$ ) and initially results in a higher real wage in B. Assuming perfect labour mobility, labour will flow from A to B until a new equilibrium real wage,  $w_{eq}'$  is reached in both regions. It is also clear that the new equilibrium will imply a higher level of investment in B, and a lower level of investment in A, and that capital may flow from A to B<sup>1</sup>, in general leading to a net change in the overall location of economic activity.

In Figure 2 we consider the case where region A suffers

<sup>1</sup>As Corden (1972), p. 32; has pointed out, the fall in regional export incomes may lead to less savings and so to less capital outflow. This may somewhat reduce the balance of payments effect due to changes in export demand conditions.

a decline in regional exports whilst there is an increase in region B<sup>1</sup>. We shall now assume zero labour mobility between A and B, the main aim being to analyse the role of capital mobility. The demand for labour in B rises from  $D_L$  to  $D_L'$  and this bids up the real wage to  $w'$ .

FIGURE 2



The opposite occurs in region A and total employment falls to  $e'$  if real wages are flexible downwards, or  $e''$  in the case of real wage downward rigidity. In the latter case and in the absence of migration, involuntary unemployment would become  $\frac{e-e''}{e} \times 100$ . On either assumption, a real-wage gap appears

between the two regions. There is now some incentive for new investment to flow towards region A, where the real wage is now relatively lower. Specifically, firms contemplating new investment in B would now consider relocation in region A -- this would raise the demand curve for labour in A and bid up the real wage rate until the regional wage-gap is eliminated<sup>2</sup>.

<sup>1</sup>This could be due to either competition between the exports of A and B, changes in tastes, or merely a structural bias in A towards declining industries.

<sup>2</sup>Of course, wage differentials could still arise due to skill level differences as between regional labour markets, especially if the l.d.r.'s attracted low-skilled labour intensive investment (see ch. 5).

In this case capital flows would be essentially equilibrating. If we assumed limited labour mobility, then, in our example outlined in Figure 1, any resulting wage-gap not completely removed by migration from A to B, would eventually be eliminated via capital movements from A to B;

The worst fears of many economists opposed to E.M.U. would indeed be allayed if it could be shown that the real world operated in the manner described above. A casual glance at the net migration of capital and labour in the U.K. regions from 1966-1971 leaves us, however, in some doubts as to the validity of the classical theory of migration<sup>1</sup>. Only in Scotland and the North could be found net outflows of labour and net inflows of capital. Other regions could be classed as having either net outflows of capital and labour or net inflows of both.

How are we to explain such movements? A number of reasons could be put forward and we shall deal with these in turn.

(i) National wage bargaining

The tendency for wage contracts to be bargained for at a national level in most countries and sectors in the E.C. implies that within these countries, regional wage differentials are not likely to be very significant. This in turn implies a lower incentive for both outward labour migration and inward capital flows. Of course, labour and capital flows are also sensitive to regional unemployment rates, but evidence suggests that this alone could hardly provide the basis for an inter-regional equilibrating mechanism<sup>2</sup> at least as far as capital movements are concerned. Furthermore, it is quite clear from our graphical example that if the real wage determined in the labour market in region B, is also applied to region A, unemployment in the latter will increase more than we have suggested. Since no real

---

<sup>1</sup>Armstrong & Taylor (1978), p. 61.

<sup>2</sup>For example in a major study of the U.K. regions it was found that "the relative attractiveness of the D.A.'s (as measured by relative unemployment rates) had apparently no effect on the movement of industry to one D.A.'s"; Ashcroft & Taylor 1979. See also ch. 9.

wage differential will appear, region A will suffer outflows of both labour and capital while the opposite will hold for region B. Only successful regional policies will reverse this tendency.

Amongst others, Pearce<sup>1</sup> has argued that the adoption of a common currency would destroy the "money illusion" that allows real-wage differences between national groups. Corden<sup>2</sup> has also suggested that trade union integration could result as a by-product of economic and especially political and social integration. Empirical surveys have shown that indeed, wage differentials do tend to be narrower between the regions of monetarily integrated area<sup>3</sup>. As a case in point, Italy is a good example of trade union integration, since, after 1969 wage bargaining increasingly took place at a national rather than regional level -- this in spite of large and even growing regional disparities in unemployment (and underemployment) rates.

(ii) The expanding industry in B may be relatively capital intensive, and therefore overall, even if real wages were relatively lower in region A, there may result in less capital being available for investment in A.

(iii) Capital is generally assumed to be more mobile than labour, however this mobility should not be overestimated. Capital mobility involves amongst other things, information costs and it is well known that most firms do not undertake extensive searches when considering relocation<sup>4</sup>. If forced to move (and the main factors here are often lack of space for expansion on site and other congestion costs), distance from the original site and the amenity level of the new location are often the main considerations<sup>5</sup>. Clearly then, regions on the periphery are often the last to be considered even though

<sup>1</sup>I.F. Pearce(1974), pp. 83-85. <sup>2</sup>W.M. Corden(1972), p. 14.

<sup>3</sup>J. Vaizey(1975), tables 1 and 2, pp. 107-108. The countries covered were Europe (7 countries), U.S. and Canada, and the figures related to 1972.

<sup>4</sup>Townroe 1972, Dixon & Thirlwall 1975, ch. 3.

<sup>5</sup>W. Molle 1977.

real-wages may be lower there. As such it may be socially and economically justifiable to discourage investment in some areas and encourage it in others. Tax incentives and capital subsidies i.e. differentiated investment regulations could then be thought of as more rather than less optimal in the allocation of resources.

(iv) One further argument to explain "perverse" capital flows to high-wage regions, is that the rate of return on capital is not only a function of wage costs. It may also be directly related to the scale of production. Hence, fast growing regions with scope for significant economies of scale may offer superior investment opportunities than less dynamic regions. This argument is of course more relevant when we take into account the high degree of openness of most regions within a country, and the high degree of dependence on a relatively small number of exports. A high and buoyant demand for a particular region's exports may therefore promote substantial capital inflows, in spite of the existence of high real wages. The presence of scale economies would circumvent the process, according to classical theory, by which factor returns are depressed in the expanding region.

It should be clear, however, that the migration of labour to fast-growing regions may serve to magnify events as described above. Labour migration implies a change in expenditure patterns from the regions of departure to those of arrival. Through the effect of the multiplier this will lead to a decline in demand in the former and a rise in the latter, leading to further expansion in the already fast growing region. As Pearce<sup>1</sup> (1974) has stated,

"... indeed it is easy to construct hypothetical cases where the migration of labour from a low wage area to a high wage area results in still higher wages where they were already high and still lower wages where they were

<sup>1</sup>Pearce (1974), p. 95.

already low. Nor does there seem to be anything odd or unusual about such examples."

#### 10.1.4. The role of exchange-rate flexibility

In this section we shall consider the policy problem of achieving internal and external balance under flexible exchange rates, and the nature of the "costs" involved when exchange rate flexibility is ruled out. Conceptually there is very little difference between countries where exchange rates are permanently fixed and regions within a country which maintains an exchange rate policy independently of its trading partners. In the former, external deficits give rise to a fall in reserves\*. In the latter a fall in regional income may initially be offset by recourse to the national banking system, trade credit or short-term interfirm loans. In both cases if the deficit

---

\*It should be noted, however, that the B. of P. deficit may be largely self-correcting if the government is determined to run a balanced budget (see D. Currie 1976, Vane & Thomson 1979). In this case, whether the private sector finance their excess expenditure by sales of securities or by running down bank deposits, the end result is a reduction in private sector net financial assets. A continuing balance of payments deficit will therefore lead to a continuing fall in private sector net wealth and a reduction in private sector expenditure -- which will tend to improve the balance of payments.

To achieve internal objectives, the government may choose, for example, to run a budget deficit, say, equivalent to the b. of p. deficit. The money supply would then remain constant with no change in private sector net wealth and therefore, private sector stock equilibrium. In this case the outflow of money to the foreign sector is exactly matched by the inflow of money to the government from the private sector.

The latter situation gives only quasi-equilibrium -- it is temporary in the sense that it can only continue as long as reserves are available. The situation is in many respects similar to that of the "regional case", where, for reasons outlined in the text above, a trade deficit may continue for relatively long periods.

persists, a contraction of credit in the country or region concerned will occur, either due to the implementation of national policies to reduce absorption in the former case, or to the pressure on regional or national banks to maintain creditworthiness. In both cases unemployment occurs. Where factors are insufficiently mobile between regions or countries there is a serious possibility of long-term inter-regional or inter-country divergence in unemployment rates, real incomes and growth.

Here we come to defining the "costs" for a particular country of maintaining a fixed exchange rate. Given the situation of internal balance at full-employment and external payments deficit, the appropriate policy would entail devaluation to achieve external balance together with some domestic reduction in absorption to maintain internal balance. As Corden<sup>1</sup> puts it, "when the exchange rate instrument is ruled out, it is necessary for expenditure to be reduced more than in the optimal case, and excess unemployment will result. This excess unemployment, valued in some way, possibly by the loss of output it represents, is the cost of foregoing the exchange rate adjustment."

In particular, the growth constraints imposed by restrictive domestic policies, may be higher for developing countries than for fully-employed mature economies. In the former case, and with surplus factors, devaluation may be a least cost method of eliminating a balance of payments deficit<sup>2</sup>. A further difficulty is that domestic credit restriction which has the

---

<sup>1</sup>W.M. Corden (1972), p. 10.

<sup>2</sup>Two major assumptions should be noted here. Firstly, real wages should be flexible downwards and there should be an elastic supply of labour. Hence the devaluation would be successful in that it would permanently lower export prices. Secondly, export demand elasticities should be sufficiently high. In practice, a number of such "successful" devaluations have been recorded for various countries (see Robinson 1979), and we shall consider this possibility in more detail later. Furthermore under circumstances common to many developing countries, successful devaluation may actually be deflationary rather than inflationary (see on). The deflationary effects may to some extent be offset by an inflow of foreign capital due to increased profitability in the traded goods sector (Cooper 1971).

effect of raising the interest rate may lead to capital inflows instead. The government would then find its hands tied; fiscal policy could not be effective in the short run, and "where there is high capital mobility, monetary policy cannot regulate internal balance either."<sup>1</sup>

In this case the optimal solution may consist of a combination of expenditure switching and reducing policies. This approach<sup>2</sup> is basically a synthesis of the absorption and elasticities schools of thought, and it worthwhile considering at this point. We shall once more assume the case of external imbalance and a fall in foreign exchange reserves. Given that the country implements a successful absorption reducing policy, demand for importables will fall and there may also be some increase in exports. Clearly, excess demand for tradables may be eliminated if the cut in absorption is sufficient.

If, however, the prices of non-tradables are rigid downwards, the fall in demand will then lead not to price cuts, but to excess supply and eventually unemployment<sup>3</sup>. Since there has been no relative price change there is no inducement for resources to move from non-tradables to tradables. Unemployment will occur and external balance will have been attained at the cost of internal balance.

To maintain internal balance a second policy instrument is called for. This can be attained by means of a switching policy which would raise the domestic price of tradables relative to the price of non-tradables. Resources would then be induced to move out of non-traded goods into the production of importables and exportables. The excess supply of non-tradables will be reduced whilst the supply of tradables will be increased, reducing excess demand for tradables and improving the balance of payments. Furthermore, as concerns domestic demand, the rise

<sup>1</sup>Corden 1972, p. 31.      <sup>2</sup>Corden, 1977.

<sup>3</sup>See also R. Dornbush 1973 and M.V.N. Whitman, 1975, p. 503.



in the relative price of tradables will shift the pattern of demand towards non-tradables, reducing excess demand for the former and excess supply of the latter.

What has happened is that the initial cut in absorption, by itself, created excess supply of non-tradables whilst the expenditure switching policy eliminated it. Had the adjustment to external balance been entirely brought about by an expenditure reducing policy, it is clear that the reduction in domestic absorption would have had to have been greater (and unemployment higher) than if it had been accompanied by a policy of expenditure switching, i.e. devaluation<sup>1</sup>. By itself, an expenditure reducing policy would create an excess supply of non-traded goods (given price inflexibility) and hence unemployment.

The above analysis was intended to emphasize the role of devaluation, and the fact that, if a country is constrained to using only expenditure reducing policies to maintain a fixed exchange rate, the resulting unemployment is likely to be significantly higher than if a switching policy of devaluation had been used as well.

A final point to note is that in practice, devaluation often takes place from a position of disequilibrium<sup>2</sup> in which domestic prices are rising relative to prices of export and import goods, and in this sense the most obvious method of rectifying the situation is by exchange-rate depreciation (Connolly & Taylor, 1979). In a vast majority of countries considered in the above-mentioned study (27 countries, from 1959-70), devaluation was accompanied by contraction of the rate of growth of domestic credit, "and with one exception, all those that did, experienced an improvement in the balance of payments" (ibid., p. 236).

---

<sup>1</sup>For a monetarist model with non-traded goods see also H. Johnson (Sept. 1975), pp. 245-49.

<sup>2</sup>For a balance of payments model analysing devaluation from a position of b.o.p. disequilibrium (applied to developing countries), see Cooper, 1971. The change in the trade balance (in domestic currency) may actually be negative with deflationary effects on the devaluing country (ibid., p. 357).

#### 10.1.5. The monetarist approach to the balance of payments

One important exception to the above, could be the case of relatively small, highly open economies, with a high ratio of tradable to non-tradable goods. In this situation a fall in the exchange-rate could lead to an immediate and profound increase in the overall domestic price level. If trade unions are well aware of this impact on the cost of living it might not be possible to reduce the real wage rate, and the effect of the original devaluation will have been completely wiped out. However, the more open an economy the greater will be the effect of a devaluation on the domestic price level, and the more unlikely it becomes that trade unions will allow money illusion to persist. Hence, the more open an economy, the less feasible an independent exchange-rate policy becomes. According to this line of argument there would clearly be no loss for such a country in joining an exchange-rate union, since it could not ultimately influence either the price or profitability of its exports.

According to some authors, this line of reasoning is not only applicable to small, open economies, but it is much wider relevance. As such, "devaluation is only a substitute for domestic credit contraction, operating by reducing the world value of a country's money supply"<sup>1</sup>. Any argument for devaluation is therefore as a means of avoiding the equivalent domestic monetary contraction, and the case for preferring the former to the latter "must rest on price and wage rigidity and money illusion of some kind"<sup>2</sup>.

There are basically two objections to the usefulness of a devaluation. Firstly, a devaluation may initially create a balance of payments surplus, but this will ultimately lead to an increase in the money supply which will in turn increase the price level of the devaluing country, eventually restoring it to its original position, measured in foreign currency terms.

---

<sup>1</sup>H.G. Johnson (1977), p. 227.

<sup>2</sup>Ibid.

Secondly, on the assumption that the economy is a price taker on world markets, the only effect of a devaluation is to increase the home currency price of exports and imports<sup>\*</sup>. This leads to higher profits and wages in the exporting sector, and workers in other sectors attempt to make up for the resulting fall in real income (and catch up with earnings in the export sector) by claiming higher wages<sup>1</sup>. This process will eventually come to an end when wages have risen sufficiently to eliminate excess or "windfall" profits in the export sector and the initial loss of real income arising from higher import prices. At this point, the price level will have increased sufficiently to have offset the impact of the initial devaluation.

Hence, the monetary approach asserts that in the long-run, changes in exchange rates tend to be offset by changes in relative price levels.

A number of criticisms can be levelled at this approach without however, necessarily implying that such tendencies do not in fact exist.

In the first place, the existence of an elastic supply of trained or trainable labour may have a dampening effect on wage increases, particularly in the growing export sectors. For example, this may well be the case for a number of actual and prospective members of the E.C., many of which have in the past supplied large number of migrant workers to other W.European countries, and which continue to have relatively high growth rates of working population.

Furthermore, empirical studies do not fully support the extreme monetarist hypothesis. For the U.S. for example, "estimates made in the two recent studies imply that the U.S. can expect to retain for some time over half of a change in the effective exchange rate in the form of a relative price advantage for manufactured exports"<sup>2</sup>. Another study concludes that "the weakest as-

---

<sup>\*</sup>i.e. a devaluation does not affect the foreign currency price of exports. This however assumes that the devaluing country was in an equilibrium position in the first place. Otherwise we could use the same argument to justify devaluation where levels of inflation differed between trading partners.

<sup>1</sup>Aukrust (1970)

<sup>2</sup>Von N. Whitman (1975), p. 522.

sumption of the (Scandinavian) theory is the hypothesis that higher export prices must eventually result in higher domestic prices"<sup>1</sup>. One of the explanations for this may be that domestic producers are, by contrast, price leaders on the home market.

If the acid test of a devaluation is whether it can bring about a permanent change in relative export prices, then a number of examples of effective devaluations are to be found; Canada 1961-62, Spain 1959-60, Finland 1957-58, France 1957-59<sup>2</sup>. Spain 1974-75 may well be another example (falling exchange rate and falling export prices). In these cases the transmission process from export prices to wholesale prices was incomplete, i.e. domestic (wholesale) prices were not determined by "world prices" of traded goods. "In other words, it has in the past been possible for a devaluation to bring about a permanent increase in either wages or profits in the exporting sector"<sup>3</sup>.

To be fair, one must admit that the results of the aforementioned study suggest that "parity changes have a larger and quicker effect on the rate of inflation than they used to have and a smaller effect on 'real' variables"<sup>4</sup>. This is especially the case for relatively small open economies, such as Belgium, the Netherlands and Finland. In some cases, however, it has been possible to achieve a semi-permanent relative price change (export prices and wholesale prices) by successive parity changes which keep one step ahead of the induced price changes<sup>5</sup>. However, the general point remains that very often<sup>6</sup> the final effect on wholesale prices is not as complete as would be suggested under the monetary approach<sup>7</sup>. Although the results do point to the limitations of parity changes as regards Italy and the U.K., as other studies have shown the success of a devaluation will often depend crucially on the accompanying restriction or neutralization of growth in domestic credit (Connolly & Taylor 1979, Horne 1979).

<sup>1</sup>W. Robinson et al. (1979), p. 42. <sup>2</sup>Ibid., p. 44.

<sup>3</sup>Ibid., p. 46.

<sup>4</sup>Ibid., p. 48

<sup>5</sup>Ibid., p. 45, especially U.K. & Ireland 1971-76.

<sup>6</sup>Excluding Belgium & Italy and possibly the U.K. (74-76). The Irish case is difficult to interpret clearly.

<sup>7</sup>See ibid., Table 4, p. 42. The period covered is 1963-76.

#### 10.1.6. Growth, technological change and the balance of payments.

One final question that has received surprisingly little consideration in the monetary union debate over exchange rates, concerns the rate of change of demand for exports and imports. In other words, there is something more to maintaining balance of payments equilibrium than simply keeping the general level of prices in line with major trading partners. "Reference to market forces reminds us that in order to maintain balanced payments in the face of growth and technical change we require continuous change in relative prices"<sup>1</sup>. This point can be seen more clearly by considering a simple two-country model. We assume there is a technological advance in country 1 which increases production, for given resources, in the commodity exported. Output and incomes will go up in country 1 increasing the demand for imports, and (if there is no change in country 2), there will be no corresponding increase in demand for exports. "To put matters right, prices must rise in country 2 or fall in country 1. Alternatively, country 1 might devalue its currency, leaving money prices constant in both countries"<sup>2</sup>.

Presley<sup>3</sup> has shown that in a simple two country trading model where both countries have the same growth rates of GNP, inflation rates and trade ratios, a sufficient assumption to achieve divergent balance of payments positions, is that import income and price elasticities differ significantly. Hence the country with the lower price elasticity and higher income elasticity of demand for imports will quickly experience a growing trade deficit, whilst the country in the reverse situation will experience a growing surplus of the same magnitude. And as Fleming has pointed out, the overall bias in such a situation may be deflationary since "the deficit rather than the surplus countries are likely to have to assume the greater part of the burden of removing the payments disequilibrium by adapting the level of demand"<sup>4</sup>.

<sup>1</sup>Pearce (1974), pp. 80-83. <sup>2</sup> Pearce, 1974, p. 81. Pearce's main complaint about adjustment via deflation under such circumstances was that the resulting unemployment problem would not be solved by factor mobility.

<sup>3</sup>Presley (1976), pp. 39-43. <sup>4</sup>J.M. Fleming (1971), p. 252.

The above model can obviously be generalised for several countries by introducing export elasticities as well<sup>1</sup>, but the general point remains that fixed exchange rates and a common rate of inflation leave many questions still unsettled, since in spite of maintaining an equal rate of inflation, differing responses to changing income and price levels could still place a country in disequilibrium with its partners.

For the moment we must turn to consider further the question raised by Corden<sup>2</sup>, of "whether centrally determined fiscal policies, and especially regional policies, provide some kind of substitute for exchange-rate adjustment, and so reduce the costs of monetary integration". We shall therefore consider the role of transfers in the context of a fixed exchange rate union, and their ability to alter the underlying real variables, in particular productivity trends and export performance .

#### 10.1.7. An extension of the Fleming/Corden theory.

To a large extent the arguments of the abovementioned economists rested on the assumption that each country within a fixed exchange rate union had its own particular Phillips curve, the precise slope and position of which depended on structural and sociological forces within the labour market. Exchange rate flexibility would allow each country to select its own preferred position on such a curve, whilst monetary union would oblige all countries to accept a common rate of inflation, implying a higher level of unemployment for countries with less favourable Phillips curves.

This proposition has been given a geometric interpretation by De Grauwe<sup>3</sup>, who also considers how an alternative and more realistic approach, including expectations, alters the analysis and conclusions. The basic two country model is represented in Figure 3. The Phillips curve of country 1 is represented in the top right

<sup>1</sup>See Presley(1976), pp. 93-97. <sup>2</sup>Cordon(1972), p. 37.

<sup>3</sup>P. de Grauwe(1975), pp. 634-646.

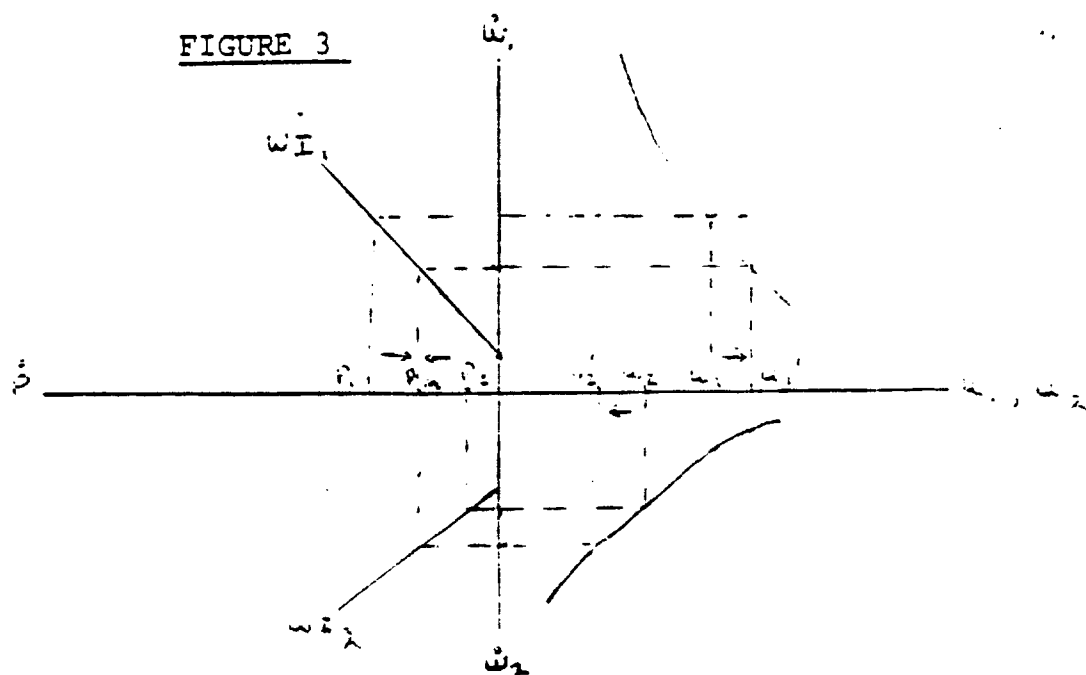
quadrant and that of country 2 in the bottom right quadrant. In the top and bottom quadrants on the left-hand side, we have represented the relationship between wage ( $\hat{w}$ ) and price ( $\hat{p}$ ) inflation. In De Grauwe's model, these are derived from a Cobb-Douglas production function under competitive equilibrium conditions<sup>1</sup> so that,

$$\hat{p} = \hat{w} - \underline{a} - \hat{q}$$

where  $\underline{a}$  is the share of labour in total product and  $\underline{q}$  is the average labour productivity.

With a constant labour share,  $\hat{p} = \hat{w} - \hat{q}$ . The intercept is found by setting  $\hat{p} = 0$ , at which point  $\hat{w} = \hat{q} > 0$ . In other words, the intercept of the WI curves gives the rate of growth of labour productivity. Given a simple mark-up model, the WI curves are straight lines with slopes equal to one in absolute value.

The way we have drawn Figure 3, the structurally weaker country 1 has a less favourable Phillips curve and a lower rate of growth of productivity than country 2.



<sup>1</sup>De Grauwe does not give the proof, but see annex 1.

At the outset, before monetary union, country 1 maintains an unemployment rate of  $U_1$  and a rate of inflation of  $P_1$ . Country 2 has an unemployment rate of  $U_2$  and an inflation rate of  $P_2$ . If these unemployment rates are maintained, it is clear that country 1 will have to devalue its currency. The equilibrium rate of depreciation of currency 1 in our example is represented by  $\hat{e} = \hat{p}_1 - \hat{p}_2$ .

In the case where the two countries maintain fixed exchange rates, inflation rates in both countries should eventually converge. This point of convergence is given as  $P_m$  in Figure 3. In our present case, a common inflation rate of  $P_m$  implies a divergence in unemployment rates with country 1 moving up to  $U'_1$  and country 2 moving down to  $U'_2$ . We are therefore back to the adjustment problem as outlined in Figures 1 and 2.

One possible means of rectifying this situation would be to introduce policies designed to equalise rates of growth of productivity (raising WI in our example). Investment incentives to raise the amount of capital per worker in country 1 could be one answer. There appears to be some evidence for the U.K., for example, that regional differences in labour productivity can largely be explained in terms of the amount of capital per head<sup>1</sup>. There still remains, however, the problem of differences in labour market structure as typified by the different slopes and heights of the Phillips curve in our example. Such factors would perhaps prove even more difficult to influence, although certain policies such as retraining programmes to reduce structural unemployment are fairly obvious methods of improving the Phillips curve trade-off by shifting it downwards.

A number of writers have argued that the trade-off between inflation and unemployment, if it exists, is of such a short-term nature as to be of no use to policy makers. In particular, Friedman's<sup>2</sup> criticism has been based on the proposition that the rate of inflation is not solely a function of the rate of unemployment,

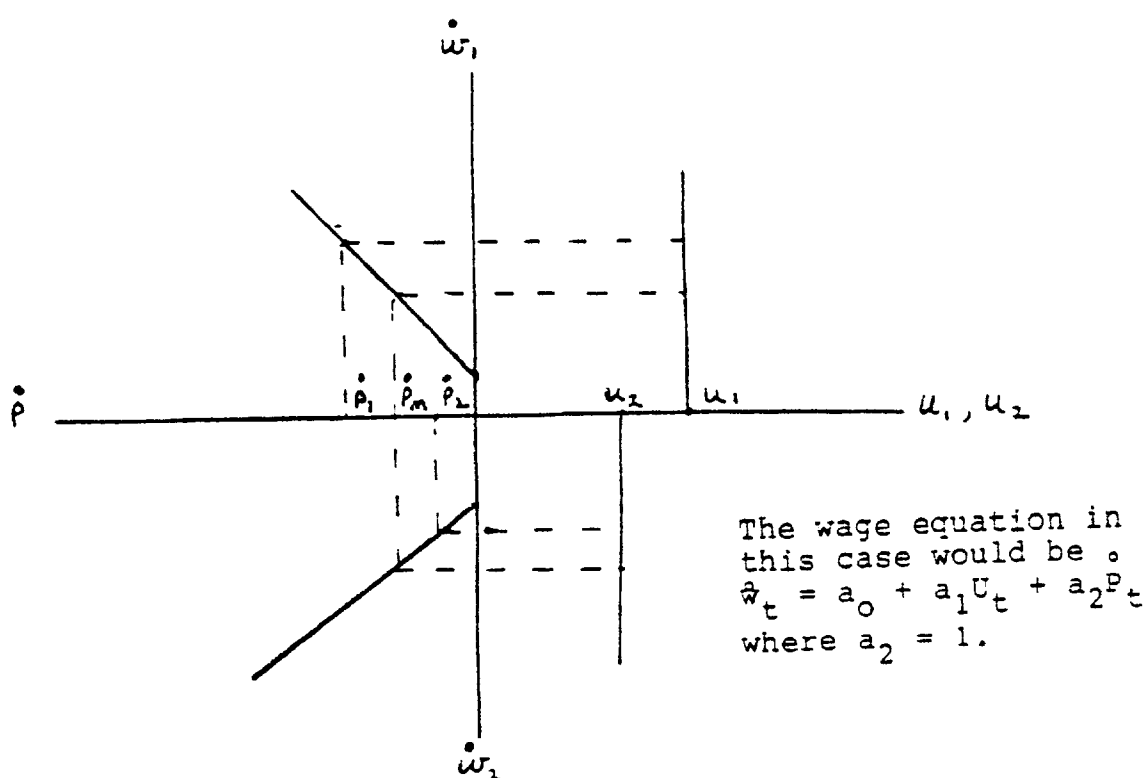
<sup>1</sup>Dixon (1973).

<sup>2</sup>Friedman (1968), see also Parkin (1972).



and that the Phillips curve is shifted vertically upwards by the expected rate of inflation. Any attempt to maintain the rate of unemployment below its "natural" rate would merely lead to a process of accelerating inflation. Hence, the "Phillips curve" under these circumstances can conveniently be represented by a vertical straight line. Figure 4 is drawn under these assumptions. According to this theory, if national governments have been convinced that monetary expansion to influence the rate of unemployment is ultimately self-defeating, it can be shown that monetary union can be achieved without cost. In our present example, country 1 has a rate of inflation of  $\dot{p}_1$  and a rate of unemployment of  $U_1$ . In country 2, inflation is at  $\dot{p}_2$  and unemployment  $U_2$ . Clearly flexible exchange rates would permit the national authorities to maintain these different rates of inflation ( $\dot{e} = \dot{p}_1 - \dot{p}_2$ ), as in our previous example. However, the outcome of a devaluation in this case may be somewhat different. Since we have assumed no money illusion in the labour market, a devaluation may be transformed into higher wage settlements in subsequent periods, until eventually

FIGURE 4



the devaluing country is back to its pre-devaluation position. In the absence of money-illusion and under the aforementioned monetarist hypothesis, a policy of devaluation, by itself, is clearly self-defeating. In this case there would be no cost involved in maintaining unemployment at its "natural" rate in both countries and establishing a common rate of inflation. The alternative for country 1 if it attempted to reduce unemployment below this rate, would be continual devaluation and spiralling inflation.

Clearly the validity of the above analysis depends crucially on both of the two extreme monetarist assumptions relating to external and internal balance. Moreover some of the subtleties of this argument should be weighed carefully. "The argument is only that in the long run -- once the various countries have restored monetary stability<sup>1\*</sup> -- the main case against monetary integration disappears ...". The path to such stability may be somewhat longer and harder than is envisaged in the above analysis. Some doubt may also be expressed as to whether the expectations coefficient is in fact unitary, and it is only under such conditions that the original Corden/Fleming argument is quantitatively destroyed. Even in this extreme case, however, it may still be argued<sup>2</sup> that the process of adjustment of expectations is sufficiently slow as to provide an effective role for exchange rate movements to accommodate structural demand or supply shifts.

What would be the role of long term transfers under the circumstances outlined in Figure 4? Clearly the fixing of a common rate of inflation does not preclude differences in rates of growth of productivity and, hence, real wages. Investment incentives to raise the capital/labour ratio in country 1 could bring about some convergence in this respect; however the fact that natural unemployment rates differ would still lead to

<sup>1</sup>Corden (1977), p. 146.      \*My italics.

<sup>2</sup>Laidler, 1972.

regional variations in unemployment even if productivity growth rates were in fact equalised. These differences would then be mainly attributable to variations in regional levels of structural unemployment, and labour market mismatch, which could at least partially be alleviated through appropriate labour-market policies (see ch. 10.4).

Whilst improving productivity and raising lagging regions growth rates is not simply a case of pumping in an endless stream of investment, it is a significant and general observation that, "low levels of productivity are found in the weaker regions (E.C. 9) in association with low capital stock"<sup>1</sup>. As we have discussed in previous chapters there are a number of convincing arguments to explain why, in the past, rather substantial rates of private and public investment in a number of peripheral areas have failed to achieve desired or expected results in terms of productivity growth.

In the European context, the process of regional development and adjustment is, in conclusion, likely to require a long and sustained effort, involving both qualitative and quantitative improvements in industrial and induced activities.

#### 10.1.8. Conclusions

In the context of economic integration and Customs Union formation, regional divergence may occur due to the intensification of competition and the increased peripherality of the l.d.r.'s, with respect to central markets. As we have argued, the further step towards monetary integration (in particular the question of fixed exchange-rates), is likely to give greater impulse to such divergence. Two types of "costs" for member states participating in such a system have been distinguished. Firstly in respect to loss of output and employment during a

<sup>1</sup>European Commission, "The regions of Europe", a first periodic report, 1981, p. 113.

transitional stage when inflation rates have to be aligned. Secondly, concerning the longer term adjustment problem when the exchange-rate tool is ruled out to achieve internal and external equilibrium.

Whilst there are certainly gains to be achieved through monetary union, such as, improved conditions of trade in the absence of exchange risk, improved capital mobility, and savings in foreign exchange reserves (especially important for smaller countries), there is no guarantee that the increased liberalisation of trade and capital flows will lead to greater economic convergence. Moreover, as some authors have argued, it is not at all clear that trade-liberalisation under conditions of economies of scale will necessarily result in optimal specialisation (Grubel, 1967). Neither can we be sure, under these circumstances, that capital-market integration, by improving intra-union capital mobility will not lead to flows of an essentially disequilibrating nature (Fleming 1971).

The above arguments are probably even more relevant for the new and prospective members of the E.C. some of which have built up their industrial base under tariff protection, and may have additional problems in adjusting industrial output from import substituting activities towards exports and the demands of international trade -- a function that may be rendered even more difficult if exchange rates cannot be easily adjusted to reflect internal price levels and changes in the composition of imports/exports.

The question of whether monetary union will be seen as beneficial by the weaker members of the Community can therefore be seen to depend critically on the nature and size of compensating measures intended to mitigate the short and long term costs of joining such a union, and the following sections will deal specifically with this question.

ANNEX 1

Taking a Cobb-Douglas production function of the form :

$$X = A \cdot K^{\alpha} N^{\alpha} \quad \text{assuming } \alpha + \alpha = 1$$

in perfect competition the real wage  $W/P$  = the marginal product of labour  $dX/dN$  (1)

$$\text{The marginal product of labour } dX/dN, = A \cdot \alpha N^{\alpha-1} \cdot K^{\alpha} \quad (2)$$

$$\text{The average labour productivity } X/N, = A \cdot N^{\alpha} \cdot K^{\alpha} \quad (3)$$

$$\text{Therefore, } dX/dN = a(X/N) \quad (4)$$

$$\text{Hence, from (1) } W/P = a(X/N) \quad (5)$$

$$\text{Let } X/N = q$$

$$\text{so, } W/P = a \cdot q, \text{ or } p = a \cdot W/q \quad (6)$$

Totally differentiating with respect to time (t) we have :

$$\begin{aligned} \frac{dp}{dt} &= a \cdot \frac{d}{dt} \left( \frac{w}{q} \right) \\ &= a \left[ \frac{q \frac{dw}{dt} - w \frac{dq}{dt}}{q^2} \right] \end{aligned} \quad (7)$$

$$\begin{aligned} \text{Separating terms in} & \\ \text{brackets} &= a \left[ \frac{1}{q} \frac{dw}{dt} - \frac{w}{q^2} \frac{dq}{dt} \right] \end{aligned} \quad (8)$$

$$\begin{aligned} \text{Factoring out } w/q, \\ \text{we multiply the first} & \\ \text{term inside the brack-} & \\ \text{ets by } w/w. &= a \frac{w}{q} \left[ \frac{1}{w} \frac{dw}{dt} - \frac{1}{q} \frac{dq}{dt} \right] \end{aligned} \quad (9)$$

From (6), we see that

$$\begin{aligned} a \frac{w}{q} = p; \text{ dividing both} & \\ \text{sides of (9) by } p \text{ we obtain} & \quad \frac{1}{p} \frac{dp}{dt} = \frac{1}{q} \frac{dw}{dt} - \frac{1}{q} \frac{dq}{dt} \end{aligned} \quad (10)$$

(10) states that the proportional rate of change of prices equals the proportional rate of change of wages minus the proportional rate of change of productivity, or,

$$\dot{p} = \dot{w} - \dot{q} \quad (\text{given constant labour share } a)$$

## 10.2. European monetary integration and the E.M.S.

Whilst our preceding discussion has outlined some of the issues involved in E.M.U., with particular reference to the implications of the decisions to maintain rigidly fixed exchange rates, this analysis should not be confused with the present reality -- that is, the new European Monetary System (EMS) and its immediate limited objective of creating a zone of monetary stability in Europe by means of closer monetary policy cooperation<sup>1</sup>.

In fact the present EMS which we will outline shortly, may be seen either as one small step in the direction of monetary union in Europe<sup>2</sup>, or, as a means of achieving greater exchange rate stability. Such stability had already become threatened by destabilising capital movements in the mid-1970s<sup>3</sup>, and <sup>this</sup> was fundamentally incompatible with the aims of maintaining the smooth functioning of the European Customs Union, both with regard to trade flows and the free movement of capital<sup>4</sup>.

The foundations for the present EMS were set in the December 1978 Resolution of the European Council<sup>5</sup>. The arrangements for linking exchange rates included, (i) parities to be fixed according to a basket of the Member States currencies at the centre of which is the European Currency Unit<sup>6</sup>. The E.C.U. serves as numéraire for the exchange rate mechanism and denominator for intervention and credit operations. After two years the ECU would take on a fuller role as reserve asset and means of settlement<sup>7</sup>; (ii) provisions for realignment of parities and

<sup>1</sup> E.C. "European Economic and Monetary Union", Periodical 3/79.

<sup>2</sup> See for example, Tindemans Report (1976) to the European Council on European Union, Bull. of the European Communities vol. 9

<sup>3</sup> See for ex. O. Emminger, 1979.

<sup>4</sup> "La proposition de relancer le processus d'intégration par un système monétaire ... est née du risque réel et très grave de désintégration que comportent le désordre monétaire et la fluctuation généralisée des monnaies." M. Ruffolo in Parlement Européen, 30 mai 1979, PE 57.519/Déf. , p. 111.

<sup>5</sup> Following from the Bremen Summit in July 1978.

<sup>6</sup> Which is also equivalent to the European Unit of Account (E.U.A.)

<sup>7</sup> This however was delayed, together with the E.M.F. proposals following the meeting of French & German heads of state in February 1980.

a 2 1/4 per cent margin arrangement (for Italy 6 per cent) on either side of the basic rate; (iii) intervention facilities. All E.C. Central Banks that are members of the scheme deposit 20 per cent of their gold and dollar reserves with the European Monetary Co-operation Fund (E.M.C.F.) and receive in return an equivalent amount of drawing rights denominated in E.C.U.'s. Equivalent amounts of own currencies are also to be deposited, in order to enable the Fund to meet this obligation. For the moment these reserves remain the property of Member States and are lodged with the Fund on a revolving swap basis.

The move to the second stage of the EMS whereby a European Monetary Fund would be established and extend the role of the aforementioned E.M.C.F., together with the implementation of the E.C.U. in its full capacity as reserve asset and settlement currency, still remains to be seen<sup>1</sup>. Neither, one must observe, is it quite clear precisely what this would involve. Certainly the ECU would move up from its present status as a mere accounting device -- however at the limit it could also imply a move towards an essentially independent Central Bank with control over 20% of the reserves at present lent to the EMCF. The possibility would then be open for the EMF to eventually create ECU's against credits and thus assume an important monetary role within the Community<sup>2</sup>. However such developments remain to be seen.

As concerns credit facilities, the EMS includes very short-term, short-term and medium-term provisions. The total amount of these credits was extended (to 23 billion ECU's) as were the periods within which repayment was to be made (between two to five years for medium-term financial assistance). As one observer has remarked, "where the decision is taken to intervene, the credit available to members is now of substantial proportions

---

<sup>1</sup> This move was to occur in March 1981 as agreed at the Dublin Summit in November 1979.

<sup>2</sup> Joint management of reserves would also imply that the Community would have to adopt a common exchange rate policy towards other trading blocks, in particular the U.S.

to give credibility to any stand which is taken."<sup>1</sup>

(iii) Supporting concessions; one condition for the success of the EMS would clearly be the improved coordination of economic policies. If monetary discipline leading to the convergence of inflation rates is necessary to make the fixed rate system workable, and if this is not to have a deflationary effect on weaker members, then accompanying measures should be implemented to offset this tendency. As it happened, doubts as to the precise status of the EMS and even more on the role that budgetary transfers should play, led to considerable disagreement over the nature that such concessions should take<sup>2</sup>. In any event, the measures introduced were only designed to play a supporting role, the primary responsibility for economic adjustment being with the Member States themselves<sup>3</sup>. The parallel measures finally agreed on, added up to an extension of the "Ortoli facility" whereby loans (of up to 1,000 million EUA per year) are made available over a period of five years with an interest-rate subsidy of 3 per cent. These loans are contracted via the Commission on the international money market, and administered through the European Investment Bank<sup>4</sup>, and E.R.D.F. The loans are for projects relating to infra-structure, energy and regional and industrial development. The interest rate subsidy is however available only to Member States actively participating in the EMS. The effect of this "New Community Facility" was firstly, to supplement funds available

---

<sup>1</sup>Hodges and Wallace (1981), p. 117. Moreover as Van Ypersele, former Chairman of the E.C. Monetary Committee, pointed out, "to the extent that changes in central rates are smaller than twice the width of the margin of fluctuation, it is not at all sure that speculation will gain." Ibid., p. 118.

<sup>2</sup>For an account see Hodges & Wallace(1981), p. 118 et seq.

<sup>3</sup>See the Resolution of the European Council, 5 December 1978, Section B. In this respect, the Commission has on occasion made some very strong policy recommendations not only in the monetary field to Member States in relation to the operation of the EMS, see e.g. Bull. No. 6 1981, point 2.1.2.

<sup>4</sup>See Article 4(3), Council Regulation (EEC) no. 214/79.



from the E.I.B. and in general overcome some of the limits posed by the E.C. budgetary problems, and secondly, to provide an instrument with selective stimulus to investment with minimal inflationary effects.

In essence the approach embodied in the E.M.S. is monetarist in character, and along similar lines to the Barre Plan discussed at the Hague Summit in 1969; the reasoning being that once exchange rates are fixed, Member States would be obliged to coordinate monetary policies in order to maintain these rates (subject to realignment by mutual consent). Where exchange rates were under an adjustable peg system, and in the context of capital liberalisation, "speculative flows could develop with which official reserves could not cope, forcing exchange-rates to move in the anticipated directions."<sup>1</sup> Hence, to be workable, the commitment to maintain exchange rates would have to be serious indeed and accompanied by appropriate economic and financial policies. As regards the workability of the system, one observer has remarked,

"Viewed as an approach to monetary integration, the main difficulty with any such system is simply that until an irrevocable commitment is made to staying in the snake, as evidenced for instance, by the pooling of reserves and the establishment of a common central bank, there can be no certainty that national monetary developments will produce uniform inflation rates and stable exchange rates ... operationally. There is no way of guaranteeing that monetary targets, even if agreed on by policy makers and adhered to, will be consistent with exchange-rate targets."<sup>2</sup>

For example, the British government at the time feared that its participation in the scheme might compromise domestic goals and policies if it were forced to follow a deflationary

---

<sup>1</sup>Robson (1980), p. 84.

<sup>2</sup>Robson (1980), p. 85.

course<sup>1</sup>, and considered parallel measures to be of utmost importance. Other countries however took a different view. In particular the Bundesbank and German government felt that "in agreeing to accept the dangers of increased inflation ... they had sacrificed as much as could be asked by the weak currency countries ... (and) ... could not be expected to 'pay twice' in the form of further concessions such as resource transfers."<sup>2</sup> Hence, a substantial degree of ambiguity remained and remains as to the place and function of parallel budgetary and financial measures<sup>3</sup>, and we shall return to this subject presently. Doubtless however, the ambiguity that remains on this question will prove to be one of the major stumbling blocks to an extension of the European Monetary System.

As a final reflection on the E.M.S., it is probable that acceptance of the scheme on the part of the weaker currency member was at least partly due to the growing acceptance of the monetarist conviction that exchange rate changes were no longer ultimately effective in altering the terms on which a country engaged in international trade. Moreover, the rather substantial intervention facilities in the scheme which will certainly help to mitigate destabilising speculative flows, are likely to prove a valuable asset for the weak currency countries especially. One may even ask whether such countries could have afforded not to enter the scheme. Given, furthermore, the facility of making periodic realignments, it is possible that more rather than less control over domestic variables is ultimately derived from membership of the system, as opposed to being out of it -- at least in the short to medium term.

---

<sup>1</sup>Green Paper on the E.M.S., 1978, HMSO Cmnd 7405.

<sup>2</sup>Hodges & Wallace (1981), p. 114.

<sup>3</sup>In particular, the Ruffolo Report (1980) of the European Parliament, was led to conclude that the extension of the "Ortoli" facility previously mentioned, does not in fact involve a redistribution of resources, and as such has minimal importance as a parallel measure.

Another factor to be recalled, is that the balance of payments situation in 1978/79 following the realignment of currencies in 1978 was particularly favourable to the operation of the E.M.S., France and Italy had strong surpluses which held up the Franc and the lira, whilst Germany acquired a current account deficit which helped to hold down the Deutsche Mark.

However, the events since 1978 have posed some serious questions as to the future workability of the system. In particular the much hoped for convergence of inflation rates has not occurred<sup>1</sup>. Moreover, it is difficult to see how convergence could be achieved over a relatively short period without substantial "real" costs for weaker members in terms of lower growth rates and higher unemployment.

---

<sup>1</sup>See European Economy, Nov. 1980, no. 7, table 2.1.

### 10.3.1. Strategies for regional harmonisation: the alternatives reconsidered

Within the context of our preceding discussion on economic and monetary integration we should distinguish at least three broad types of transfers necessary for the long term economic convergence and stability within the system: (i) long-term transfers aimed at correcting and improving the industrial structure and productivity of the weaker regions; on the one hand to achieve the convergence (or prevent divergence) of regional growth rates, and on the other, to compensate for the potentially adverse competitive and locational aspects deriving from the formation of a Customs Union and operation of a unified Common Market; (ii) transfers aimed essentially at compensating for adverse cyclical and secular movements in regional economic activity and incomes; and (iii) in the context of public and Community finance, transfers for the provision of general infrastructure and essential services vital to improving the development potential of weaker or disadvantaged regions (and complementary to (i)).

Regarding the above approaches it seems clear that the level of integration and political cohesion will ultimately determine the nature and level of the transfer redistribution system adopted. Whilst it is at present possible to conceive of a restructuring of Community funds and policies (see on) which would achieve greater convergence in terms of (i) and (iii), the scope for more automatic financing in the context of (ii) is, in the absence of a federalist approach to public finance, limited to specific ad hoc measures delivered essentially at the micro-economic level.

A further point to note is that one should distinguish between net transfers in the context of the Community budget (or inter-state net public finance transfers in a federal system), and loan systems (e.g. through the EIB, subsidised or not through the budget). If the regional problem, as evidence shows, is one of

long-term structural imbalance expressed in persistent regional differences in productivity levels, one may be led to doubt whether a transfer system based essentially on loans would be at all realistic under fixed exchange rates, since there is a distinct risk that it could merely push them into long-term indebtedness. A similar criticism can be levelled at medium/long term reserve transfers to support fixed exchange rates, and more so, in the latter case, if there is no guarantee that such transfers would be used for productive investment instead of, say, deficit financing<sup>1</sup>.

On the other hand one is also led to the conclusion that neither would full fiscal integration (although contributing substantially to reducing income disparities), provide an obvious solution to long-term structural imbalances. Whilst such a system, based on a common Community scale of public services and common basis of taxation, would automatically provide 'aid' for regions or countries whenever their trading relations with the rest of the Community deteriorated<sup>2</sup>, national experience unfortunately abounds with examples where such transfers have become permanent and even expanding in character with presumably little impact on correcting the underlying imbalances (see ch. 4.2.).

Automatic equalising and stabilising inter-regional flows of this type may however be seen as an essential accompanying measure under E.M.U., particularly if it is expected that dynamic gains and losses through integration will take on specific sectoral and regional dimensions. Moreover, it is probable that the amount of net transfers involved under fiscal integration could be substantially limited (as compared to national systems), by concentrating on a relatively limited number of highly redistributive measures (see on).

<sup>1</sup>In this respect there is a good argument for claiming that support for the Belgian Franc in the EMS totalling some Bfrs 340bn. (£ 4.2bn.) up to autumn 1981, must have gone a long way propping-up the current high levels of deficit spending in that country.

<sup>2</sup>As Kaldor (1970) has argued, this would occur since taxes paid to the central authority vary with the level of local incomes and expenditure whilst public expenditures do not, hence, "any deterioration in the export-import balance tends to be retarded (and ultimately arrested) by the change in the regions' fiscal imbalance", op. cit., p. 345.

Whilst taken alone, none of the abovementioned transfer systems by itself provides an adequate answer to the problems of integration, each has its own particular function and is complementary to the others. As such, progress towards further integration would necessarily imply an extension of Community financing in all three directions.

At the moment, however, existing provisions within the E.C. budget appear inadequate even for the present purposes of maintaining exchange rates within the present E.M.S., let alone the demands of closer monetary union. Within any closer arrangement, and indeed for the continued workability of the present system, given serious and growing disparities in economic performance and unemployment within the Community, it may be necessary to provide a budget which operates to provide a clear net transfer of resources between regions and countries on the lines described above. The problems incumbent on establishing such a budgetary system are not to be underestimated, and in the following section we shall consider and assess some of the relevant proposals that have been made in this direction.

### 10.3.2. The role of budgetary transfers and public finance in European integration

The role of Community finance is, of course, a central question in any discussion of future European integration, quite apart from any amendments that may, in the meantime, be necessary to adapt to changing economic and social conditions within the Community. The subject by itself constitutes a third major aspect of economic integration along with aspects concerning free trade and monetary integration.

In the present Community context, the subject has been given its most thorough treatment in a report prepared by a group of independent experts set up by the Commission, and presented in 1977<sup>1</sup>.

The report considers firstly, at the level of individual Member States of the Community and in several existing federations, the financial relationships between different levels of government and the economic effects of public finance on geographical regions within these countries. Secondly, the report outlines the kind of expenditures and taxes existing in fully integrated economies which could be adopted at the Community level, under three hypothetical stages towards closer union.

The main findings contained in the report may be summarised as follows:

- the equalising effect of public expenditure and taxation in the countries studied was considerable and reduced regional inequalities<sup>2</sup> in per capita income by, on average around 40%. Net inter-regional transfers were not, however, found to be very substantial expressed as a proportion of G.D.P., being some 2.5% in the United States, 3.7% in the U.K. and 4.2% in Italy. Such transfers tend to offset, by a roughly equivalent amount, the balance of payments deficits (current account) of the poorer regions (the former being in the range of 3-10% of regional product and up to around 30% in a few instances), and are often of a continuing nature;

<sup>1</sup>"Report of the study group on the role of public finance in European integration" (MacDougall Report), vols. 1 & 2, European Commission, Brussels 1977.

<sup>2</sup>Measured by the change in Gini coefficient of regional personal income inequality due to public finances.

- public finance also plays a major role in cushioning short-term and cyclical fluctuations, offsetting between one half to two-thirds of a short-term loss of primary income in a region. The study cites the lack of this mechanism at the Community level as a major reason why monetary union under present circumstances is impracticable<sup>1</sup>;
- in considering the functions and *raison d'être* of inter-regional redistribution in maturely integrated economies the study notes;

"Inter-regional redistribution produces a reasonably equitable sharing of both the cyclical and secular fortunes of an economic union, and thereby helps to maintain its political unity; it helps as far as possible attainment of comparable economic performance between regions; it compensates for the inability of regions or states to use trade or exchange rate policies in the management of their economies, and it limits the extent to which migration has to serve as part of the economic adjustment process."<sup>2</sup>

In the light of these and other findings, the report considers three hypothetical degrees of integration which the Community might achieve towards closer union, and outlines the implications concerning the role of public finance. These three stages are;

- (i) pre-federal integration
- (ii) federation with a small public sector at the Community level
- (iii) federation with a large public sector at the Community level.

At the fullest stage of integration, it is conceivable that federal public expenditure would come to account for between 20-25% of GNP. Here, many of the major social and welfare expenditure functions would be administered by the federal government which would also, on the tax side, take predominance over state revenues. Whilst gross intergovernmental and other inter-regional flows of funds would be very substantial, performing important equalisation and stabilisation functions, it would also be possible to perform the same functions by means of net inter-state financial transfers which would imply a much lower level of

<sup>1</sup>Ibid., vol. 1, p. 12.

<sup>2</sup>Ibid., vol. 1, p. 61.



federal integration.

For example, under hypothesis (ii) it is possible to envisage the supply of social and welfare services remaining at the national level, whilst the equalisation of public service provision would be achieved by inter-regional financial transfers.

In a similar way, federal aid programmes for particular industries and regions could be limited to selective intervention, 'topping-up' national efforts (by means of variable matching ratios<sup>1</sup> for greatest effect, where fiscal capacity varies significantly).

As the MacDougal study points out, in order for the small public sector federation model to be capable of sustaining an economic and monetary union,

"the transfers and expenditure under the budget equalisation mechanism for 'social and welfare' and 'economic services' would have to be not only strongly redistributive but also capable of a sensitive and large-scale response to short-term changes in the economic fortunes of regions and states"<sup>2</sup>.

Conceivably, and if the budgetary instruments were "strongly and deliberately biased in favour of these objections"<sup>3</sup>, total civil Community expenditure would then account for 5% to 7% of Community GDP.

The work of the study group was however largely centred around the transitional scenario of a "pre-federal budget", since this posed questions of more immediate relevance. Under this schema, public expenditure at the Community level would more than double from its present level to reach between 2% to 2.5% of Community GDP. The Community's economic policies at this stage are assumed to include intervention in some industries as well as structural and redistribution policies designed to bring about greater inter-regional convergence: they would assist in the completion of the Common Market (e.g. the elimination of non-tariff barriers, other distortions to trade, and fuller movement of capital and labour), and further steps towards economic and monetary coordination (stopping short of monetary union).

The main directions in which the Community's expenditure

<sup>1</sup>See ibid., vol. 1 section 4.6.

<sup>2</sup>Ibid., p. 70.

<sup>3</sup>Ibid.

might be changed in the "pre-federal integration" phase, include the following;

(i) Community involvement where "economies of scale" can be achieved in one way or another -- e.g., development aid, advanced technology, energy. Since this would imply a transfer of operation from the national to Community level, the implications for net aggregate public expenditure as a share of GNP are quite limited;

(ii) The main need for substantial expenditure at the Community level would arise in the area of structural, cyclical employment and regional policies. The purpose of these measures being to help reduce inter-regional differences in capital endowment and productivity. Several possibilities are mentioned:

a) More Community participation than at present in regional policy aids (wide definition -- investment incentives, public infrastructure, urban redevelopment)

b) More Community participation than at present in labour market policies (including vocational training and other employment measures)

c) The creation of a Community Unemployment Fund along the lines suggested in the Marjolin Report. This, according to the study, would have a strong redistributive (and counter-cyclical) effect without leading to any great increase in budgetary expenditure. The latter assumption must now, however, be open to a fair amount of scepticism

d) A limited budget equalisation scheme for extremely weak Member States to bring their fiscal capacity up to around 65% of the Community average to ensure reasonably equitable standards of welfare and public services

e) A system of cyclical grants to local or regional governments, dependent on regional economic conditions

f) A "conjunctural convergence facility" to make available packages of Community finance to weaker Member States aimed at preventing divergent structural gaps. Suggestions d), e) and f) are put forward as being to a high degree substitutable, and therefore as possible alternatives.

The net cost of the above measures would come to around 1% of Community GDP; this would be balanced by savings in present policies, where possible (e.g. agriculture), the additional finance coming from some variant of the VAT tranche system, based on a formula using a progressivity key such as personal income tax capacity.

Concerning redistributive power, the study assumes that a selection of the abovementioned instruments -- if concentrated heavily on the weakest Member States and regions -- could result in an equalisation of around 10% of existing income per capita differentials between (9) Member States.

It is notable in the budget model described above that Community expenditure under "social and welfare" services would remain very limited; the largest component being in the form of a general purpose equalisation mechanism to enable weaker members to top up their own budget efforts.

The general principle is that at a pre-federal stage the major part of payments to Member States should be on a conditional basis -- unconditional horizontal redistribution between states having its place at a later stage within a federation with a small "top" level public sector. Conditional transfers, however, in general are likely to be less efficient than unconditional ones as instruments of redistribution because it is improbable that all the recipients of benefit will be in the poorer countries<sup>1</sup>;

"The result is that the redistributive power of the extra expenditure most appropriate for the Community in the pre-federal integration period is likely to be substantially smaller than the maximum that could be attained if the same amount of spending took the form solely of unconditional net transfers from richer to poorer member countries" (*ibid.*).

The above analysis may, however, need some clarification on a number of points. In the first place too much emphasis is placed on "redistributive power" in terms of inter-state or inter-regional per capita average incomes<sup>2</sup>, which abstracts from the problem that losses and gains from the integration process may be just as marked at an inter-personal as at an inter-regional or state level.

In the second place it is difficult to understand why the report makes the specific exception to Community non-involvement in social security systems, in the field of unemployment benefit.

---

<sup>1</sup>*Ibid.*, p. 63. For examples see discussion in ch. 10.3.

<sup>2</sup>See *ibid.*, section 4.3.

There is a certain amount of confusion on this general issue, since it is perfectly possible that such involvement could take the form of intergovernmental transfers, without the need for "national governments to transfer powers over "internal" income distribution to the Community" (*ibid.*, p. 59), as the study puts it. There is a clear contradiction between on the one hand dismissing Community involvement in social security systems, and on the other arguing for it in a very important field (unemployment) on what are somewhat narrow, and probably misconceived political arguments and objectives.

What the study does not mention, but to which attention was drawn in Chapter 2, is that very little effort has as yet been made by the Community in the field of harmonising social security systems. Whilst the present author would not attempt to argue for inter-state equalisation, the inadequacy or near total lack of such benefits in several of the poorest Member States is obviously a matter of Community concern. Presumably, the lack of reaction on the part of the Community until now arises from placing too much emphasis on inter-regional imbalances and paying too little attention to inter-personal differences in living standards. However, if the Community continues to view divergence solely in terms of averages (e.g. regional per capita incomes) it runs the risk of totally ignoring adverse developments in the fortunes of very large sections of its constituent population.

Moreover, taking the findings outlined in Chapter 2 (with regard to poverty-gap estimates), it seems clear that a system of limited, inter-state specific purpose grants aimed at filling gaps in certain national income-maintenance programmes, could achieve a substantial impact whilst representing only a relatively small net transfer of resources comparable with any of the present major structural funds. This would furthermore help achieve one of the main aims of the pre-federal or small public sector federation stage, which is to provide a Community budget with strong redistributive and stabilising characteristics.

To sum up the main conclusions to be drawn from the MacDougal Report and our preceding discussion, we may stress the following points:

i) advance in the sphere of public finance, and development and extension of the Community budget can be seen as a clear pre-condition for further levels of integration, most notably monetary union;

ii) to make integration acceptable to all participants may require an explicit redistributive mechanism to divide the gains from integration in a politically acceptable way. The costs as such may effectively be defined at a sectoral, regional or inter-personal level. A partial solution in the latter case would be to ensure, at least, a minimum standard of provision of social security benefits, the establishment of which would require a limited net transfer of resources within the Community budget;

iii) the general considerations under i) and ii) suggest that, for present and future purposes, the Community budget should no longer be viewed independently of its redistributive consequences.

#### 10.4. The role of E.C. funds

In a fundamental sense any discussion of the perspectives for future monetary integration and the extension or adaptation of the Community's budgetary system must be seen in the light of the regional and distributive impact of the present funds, and their scope for improvement.

On this point, the Commission together with certain Member States has stressed the need to view the E.C. budget and funds independently of any criterion of 'juste retour', arguing that the revenues accruing to the E.C. budget are fundamentally the property of the Community, to be dispersed in accordance with common needs as the Community sees fit. Whilst such a view undoubtedly serves to increase political unity and coherence within the Community, and to minimize disruptive internal haggling as to who benefits most, the question of overall redistributive consistency within the system cannot be overlooked.

The Community budget itself is relatively small in comparison to the total of Member States budgets (around 2 1/2 per cent), or to their total GDP (.81 per cent)<sup>1</sup>. Whilst a certain proportion of this budget (around 18%) comprises expenditures on structural interventions in the regional, social and agricultural fields, the largest slice of spending goes on market intervention in agriculture (around 70%). It is largely on this latter question that the British government in particular has criticised the E.C. budget for redistributing funds from poorer to richer countries. Following from the recent British demands for a review of their budgetary situation the Commission published a series of statistics relating to gross and net

---

<sup>1</sup>Figures relate to 1979. E.C. Commission, "Global Appraisals of the Budgetary Problems of the Community", COM(79) 85.

budgetary contributions for 1980. Taking M.C.A.'s as export subsidies (which in fact conforms to administrative practice since 1976), gives the following overall figures<sup>1</sup>. Member

=====

EXPENDITURES, RECEIPTS FROM AND BALANCES BY MEMBER  
STATES IN 1980, AS % OF TOTAL.

	EXPENDITURE	RECEIPTS	BALANCE
FRG	22.0	29.81	- 7.8
Denmark	5.5	2.37	+ 3.2
Netherlands	11.5	8.68	+ 2.8
Belgium	9.7	6.17	+ 3.5
Luxembourg	2.2	0.12	+ 2.1
France	19.7	18.96	+ 0.7
U.K.	7.9	21.09	- 13.2
Italy	16.7	11.90	+ 4.8
Ireland	4.8	0.90	+ 3.9
	<u>100</u>	<u>100</u>	<u>0</u>

<sup>1</sup>E.C. Commission, COM(80) 147, 20 March 1980. The Commission also gives expenditures and receipts with reimputation of M.C.A.'s to the importing country -- that is, under the view that the economic effect of M.C.A.'s is to subsidize consumers rather than exporters. In view of the fact that M.C.A.'s have largely functioned as subsidies to trade between high-cost to low-cost producers, we consider it more realistic to consider them as export rather than import subsidies.

=====

States in the table above are arranged in two groups in order of G.D.P. per capita. In general receipts, or gross contributions to the E.C. budget are fairly proportional to GDP of the respective Member States, being automatically determined by V.A.T. revenues, duties under the C.E.T. and levies under the C.A.P. Hence differences in the net balance are mainly attributable to the distribution of spending between the

various funds, and the EAGGF (Guarantee) in particular<sup>1</sup>.

In 1977 total E.C. commitments on structural funds (EAGGF, ESF, ERDF, ECSCF) averaged only .117% of Community GDP.

This is not in fact to criticise these funds themselves, but rather to point out that in their present form and size they are unlikely to bring about any significant transfer of resources, productive or otherwise.

Budgetary expenditure of the European Communities, 1953-81, in million u.s./EUA/ECU (a)

	ECSC operational budget	European Development Fund	Eurostat (b)	EC general budget					Total EC	Total
				FEOGA (c)	Social Fund	Regional Fund	Industry Energy Research	Adm and others (d)		
1958	21.7	—	7.9	—	—	—	—	5.9	5.9	35.5
1959	30.7	51.2	39.1	—	—	—	—	25.2	25.2	146.2
1960	23.5	63.2	20.0	—	—	—	—	28.3	28.3	135.0
1961	26.5	172.0	72.5	—	8.6	—	—	25.4	34.0	305.0
1962	13.6	162.3	88.6	—	11.3	—	—	81.0	92.3	356.8
1963	21.9	55.5	106.4	—	4.6	—	—	79.5	84.1	267.9
1964	18.7	35.0	124.4	—	7.2	—	—	85.9	93.1	271.1
1965	37.3	248.8	120.0	102.7	42.9	—	—	55.5	201.1	607.2
1966	23.1	157.8	129.2	310.3	26.2	—	—	65.8	402.2	717.3
1967	10.4	105.8	158.5	562.0	35.6	—	—	77.5	675.1	949.8
1968	21.2	121.0	73.4	2 250.4	43.0	—	—	115.3	2 408.6	2 624.2
1969	40.7	104.8	59.2	3 818.0	50.5	—	—	182.7	4 051.2	4 255.9
1970	56.2	10.5	63.4	5 228.3	64.0	—	—	156.1	5 446.4	5 579.5
1971	37.4	236.1	—	1 883.6	56.5	—	65.0	234.3	2 269.3	2 562.8
1972	43.7	212.7	—	2 477.6	97.5	—	75.1	424.3	3 074.5	3 330.9
1973	86.9	210.0	—	3 768.8	269.2	—	63.1	533.8	4 641.0	4 937.9
1974	92.0	157.0	—	3 651.3	292.1	—	32.8	1 011.9	5 038.2	5 297.2
1975	127.4	71.0	—	4 526.6	360.2	150.0	99.0	1 017.8	6 213.6	6 412.0
1976	94.0	320.0	—	6 033.3	176.7	300.0	113.3	1 329.2	7 952.6	8 336.5
1977 (e)	93.0	800.0	—	5 567.6	55.3	400.0	167.0	1 303.9	8 482.2	9 376.2
1978	149.8	334.5	—	9 552.3	256.5	254.9	266.3	1 430.8	11 384.2	12 422.5
1979	143.0	479.0	—	10 765.0	527.0	499.0	288.0	2 368.0	14 447.0	15 069.1
1980	—	544.0	—	11 878.0	374.0	403.0	380.0	2 648.0	15 683.0	16 415.5
1981 (f)	—	—	—	13 436.8	560.0	1 774.7	337.3	3 131.1	19 239.9	—

Sources: 1958-79: Management accounts. 1980: General budget (a) u.s. until 1977, EUA 1979 onwards. (b) Incorporated in the EC budget from 1971. (c) This column includes, for the years to 1970, substantial amounts carried forward to following years. In 1977 appropriations for the Social Fund carried forward. (d) Including the European Parliament, the Council, the Court of Justice, the Court of Auditors and the administrative part of the ECSC budget. (e) In 1977 appropriations for the Social Fund carried forward from 1976 and subsequently cancelled amounted to 227 716 611 u.s., while total expenditure for 1977 amounted to only 172 439 999 u.s. giving the net figure shown here. (f) Draft budget established by the Council on 29 September 1980.

<sup>1</sup>For Italy the figure was .29% GDP, for Ireland .59% and for the U.K. .20% of GDP (figures derived from Eurostat, Regional Statistics - Community's financial participation in investments, and European Economy, Annual Economic Review, November 1980).



#### .4.1. European Regional Development Fund (E.R.D.F.)

The E.R.D.F. was set up in 1975. It had been given the basic aim of correcting regional imbalances within the Community resulting from a high dependence on agricultural employment, industrial change or structural underemployment, and as evidenced by (i) relatively low levels of per capita income, (ii) high rates of outmigration and unemployment, or (iii) structural deficiencies in the labour market<sup>1</sup>.

The Paris Summit of 1974 agreed on the amount of the Fund from 1975-77 (1,300 million U.A.), to be distributed on a quota basis to those countries with the most serious regional problems. The Fund operated by partially reimbursing Member States' expenditures for infrastructure projects and aids to productive investment, falling into the coverage and working of the respective national regional policies. These rates of reimbursement amounted to between 10-30% for infrastructure and 20% for expenditure on productive investment, with a ceiling of 50% of the national aid.

In 1980, 74% of quota-fund assistance went to infrastructure projects and 26% to industrial and service projects.

The Fund's operations were revised for 1978-80, one of the major innovations being the creation of a 5% quota-free section, which may also, under certain conditions, be applied in non-development areas. Other major changes included a wider scope of eligible activities, including small and medium sized enterprises, handicrafts, tourism and services, and a higher maximum rate (40%) for infrastructure projects of particular importance<sup>2</sup>.

As concerns investments in industry and services, Fund assistance can be applied either (i) as a global addition to Member States' expenditure, thereby increasing the total re-

<sup>1</sup> See Council Regulation (EEC) no. 724/75, establishing a European Regional Development Fund, O.J. no. L73 of 23.3.1975.

<sup>2</sup> See Council Regulation (EEC) no. 214/79, O.J. no. L35/1, of 9.2.1979.

sources available, or (ii) to "top up" the aid granted by a Member State for a particular investment. The principle of "additionality" holds in both cases, such that E.R.D.F. expenditure should not be used by national authorities to make corresponding reductions in the funds they themselves make available. In practice, the latter alternative is generally avoided because of its clearly discriminative nature and is used mainly as a selective measure for particular high-priority projects and regions.

A final measure which has become effective is that the E.R.D.F. may now provide assistance (wholly or partly) in the form of a rebate of three percentage points on loans made by the European Investment Bank<sup>1</sup>. Whilst it is as yet early to assess the use made or impact of this measure, we may note that one of its original functions was intended to be the (indirect) relief of exchange rate risk associated with E.I.B. loans denominated in E.U.A.'s<sup>2</sup>.

The overall impact of the new measures, in particular the non-quota section and EIB interest-rate subsidy, is to give much broader scope to the Commission both in terms of range of eligible activities and the possibility of intervention in specific projects.

The provision of long-term loans for productive investment at beneficial rates, which could be expanded upon via the E.R.D.F., would undoubtedly play an important role in the present and enlarged Community, providing an instrument which could be used as an additional incentive rather than as a mere token contribution to national expenditures on regional policies.

---

<sup>1</sup> Concerning projects (i) for developing less developed regions, or (ii) modernization, conversion or new activities which are of such a size or nature that they are unlikely to be financed by the Member States concerned.

<sup>2</sup> E.C. Commission, "Community Regional Policy. New Guidelines, Bull. suppl. no. 2, 1977.

This is particularly important if, as we have mentioned in previous chapters, lack of investment funds or differential interest rates in l.d.r.'s, provide a bottleneck to development potential in these areas. Given that regional policies in Greece and Portugal especially are still at a very early stage in spite of severe spatial and sectoral imbalances<sup>1</sup>, such intervention could provide a relatively quick and effective means of making resources available for productive investments. Moreover, since provisions already exist to provide EIB loans through the national banking systems, they are very amenable to extension on a wide geographical scale and over a wide range of activities (including smaller projects for which the grant system may be less suitable).

#### 4.2. The European Investment Bank (E.I.B.)

The EIB was established by the Treaty of Rome (Arts. 129, 130), with the task of contributing, by having recourse to the capital market and utilising its own resources, to the balanced and steady development of the common market in the interest of the Community. It operates on a non-profit making basis, granting loans and giving guarantees to facilitate the financing of the following projects in all sectors of the economy:

- (i) projects for developing less developed regions;
- (ii) projects for modernising or converting undertakings or for developing new activities, called for by the progressive establishment of the common market, where the nature or size of the project is such that it cannot be entirely financed by the individual Member States;
- (iii) projects of common interest where the same caveat as (ii) applies.

---

<sup>1</sup> See European Economy, July 1981, pp. 115-17.

The EIB may provide loans to private or public enterprises and to states (e.g. Länder) and financially autonomous public authorities (e.g. Italian regions)<sup>1</sup>.

Planned investment projects must be well-specified, pursue a defined objective and be capable of being carried out within a set period of time. Moreover, where projects are undertaken by firms in the production sector, debt-servicing payments must be made out of operating profits. Thus, projects must be seen as viable where productive investments are concerned, whilst for infrastructures the main consideration is the general economic benefit derived from the project.

Loans are only intended to cover part of project costs, the exact proportion varying from case to case but rarely exceeding 50% of the cost of fixed assets involved, and not normally exceeding 80 million EUA for any given project.

Whilst the EIB prefers to make individual loans of not less than 1 million EUA, finance for smaller projects may be made through the global loan system. These loans are in the first instance made available to banks or financial institutions for financing small and medium scale ventures, when projects do not exceed a total cost of 12 million EUA. The institution involved then becomes the contractual borrower. This process may also be used for individual indirect loans of a larger size where this method of financing is more convenient.

The EIB's rate of interest approximates closely to the cost of borrowing on international capital markets and is independent of the type of project, location or status of the borrower.

As we mentioned earlier, the E.R.D.F. may provide assistance in the form of a three percentage point rebate on EIB loans provided that the latter also conforms to certain criteria and to the general objectives of the E.R.D.F.<sup>2</sup>. The extension of the

---

<sup>1</sup>But does not make loans to be used for local government services such as health or welfare services.

<sup>2</sup>Arts. 130(a) and (b) of the Treaty of Rome and Article 3, Regulation no. 214/79.

interest rebate facility (previously available only to loans granted under Article 56 of the ECSC Treaty), has the direct effect of subsidizing investment, and indirectly, the exchange-rate risk inherent with loans denominated in EUA's<sup>1</sup>, which is particularly relevant for investors in weak-currency countries.

Borrowing operations of the EIB have increased considerably over the late 1970's -- from 826 million EUA in 1974 to 1,030m. EUA in 1977 and 2,437m. EUA in 1979<sup>2</sup>. From relatively modest beginnings the EIB has now become a potentially major actor in the financing of regional development programmes and projects. However, as we have seen, a certain amount of flexibility and extended provisions may be necessary if loans from the EIB are to become more readily acceptable to private investors, and especially those of small/medium size. This in turn is likely to imply a fair amount of delegation of authority to various banking and regionally autonomous financial institutions.

Concerning the distribution of EIB finance, an analysis of loan commitments for 1977 for example, shows that around 60% of loans to industry went to investments in the energy and water sectors. The steel industry (particularly Scotland) also benefitted substantially. However, loans to manufacturing industry (excluding steel) amounted to less than 11% of total loans made by the EIB in that year. Loans for the financing of infrastructures accounted for around 30% of total lending, the greatest part being towards projects in transport and communications<sup>3</sup>.

In 1977, as in 1976, loans granted by the EIB were concentrated in relatively few regions -- some sixteen regions accounting for three quarters of all loans.

---

<sup>1</sup>As one author points out: in the U.K., only those firms with sufficient foreign-exchange facilities have in the past been able to avail themselves of EIB loans, which have mainly benefitted public-sector undertakings where a Treasury guarantee was available. In 1978 the Treasury took the decision to provide a limited measure of protection to private firms receiving such loans, against adverse exchange rate movements. Mac-lennon & Parr (1979), p. 265.

<sup>2</sup>European Economy, no. 7, 1980, Table 42.

<sup>3</sup>Eurostat 1977, "Community's financial participation in investments".

As a final remark, we should note that, as a banking institution the EIB is quite distinct from the other financial instruments and funds available in the Community. As such there may be an increasing call to limit its present independence or to integrate it more fully with other Community instruments; as one report put it, "the more the Bank takes on tasks which could have been performed by the Commission ... the stronger will be the demand that its activities should be brought under proper control."<sup>1</sup>

#### 10.4.3. The European Social Fund (E.S.F.)

The E.S.F. was established by Article 123 of the Treaty of Rome with the task of rendering the employment of workers easier and of increasing their geographical and occupational mobility within the Community.

Initially, the main aim was to help reduce unemployment by facilitating the mobility and retraining of workers. As such the "regional dimension" of the fund was essentially limited to stimulating the migration of workers from backward areas and easing congestion and mismatch on the labour market. There were two main weaknesses of the original E.S.F.; in the first place, it could only intervene retroactively -- i.e. when the retrained worker had been actively employed for 6 months; in the second place intervention depended heavily on the availability of programmes and funds available for retraining and resettlement in the respective countries involved. One resulting anomaly of the system was that W. Germany received a total of 44% of funds granted between 1960-76<sup>2</sup>. "The Federal Republic benefitted more because the authorities there were sufficiently well-organized to put in claims that were likely to be met, and were in a position to contribute their half of the aid in question."<sup>3</sup>

In 1971 the E.S.F. was revised and extended in order to

---

<sup>1</sup>European Perspectives, "The Finances of Europe", E.C. 1981, p. 159.

<sup>2</sup>"The Social Policy of the E.C.", E.C. Documentation periodical 3/1981, Table 4.

<sup>3</sup>European Perspectives, "The Finances of Europe", 1981, p. 234.

better fulfil the obligations covered in Article 123, and to remedy some of the shortcomings of the previous fund.

Two types of intervention under the new fund are to be distinguished; under Article 4, the ESF can intervene (only) on the basis of a proposal by the Commission and subsequent decision by the Council, when the employment situation is affected by Community policy or when the need arises for joint action to improve the balance of labour supply and demand within the Community.

In the past nine years only six decisions have been made. They relate to retraining and reintegration schemes and aids to promote geographical mobility for the following categories:

- (i) persons leaving agriculture who take up employment elsewhere (Decision 72/428/EEC)
- (ii) workers in the textile and clothing industries who move to other employment within or outside that sector (Decision 72/429/EEC)
- (iii) migrant workers (Decision 74/327/EEC)
- (iv) young persons under 25 who are unemployed or seeking employment (Decision 75/459/EEC, Decision 78/1036/EEC, Regulation (EEC) no. 3039/78). Resulting from the latter regulation, direct financial assistance of up to 30 EUA per person per week may be given for up to 12 months
- (v) operations aiming to promote the employment of women over 25 years (Decision 77/804/EEC).

Apart from the decision (i) above (for which there is no time-limit), unless renewed all the remaining decisions lapse at the end of 1980.

A second type of assistance from the new E.S.F. (Article 5), in which the fund may intervene without a specific Council decision, concerns (i) the various employment problems affecting underdeveloped or declining regions; (ii) sectors particularly affected by technical change and (iii) the handicapped.

The types of aid given under the reformed E.S.F. can be classed as follows:

- (i) aid to facilitate training, or retraining, or the improvement of skills
- (ii) aid to facilitate the mobility of workers and their

dependents

- (iii) aid to remove obstacles to the employment of certain workers e.g. the handicapped
- (iv) aid to promote employment in economically disadvantaged regions, e.g. temporary income support.

Concerning the distribution of assistance, the Commission put a series of proposals for reform to the Council, which has resulted, since 1978, in at least 50% of the Fund's appropriations being reserved for operations (under Article 5) designed to resolve employment problems in the less-developed areas of the Community -- assistance for these operations being given at the increased rate of 55%.

In terms of available funds, the ESF is being placed under heavy strain. In 1977 the number of applications exceeded budget resources by 52.3% and in 1977 by 70.4%.

In terms of persons benefitting from ESF programmes, it has been estimated that in 1979 around 460,000 received money by way of "regional" aid, 450,000 benefitted as young people and 285,000 as migrant workers<sup>1</sup>. Moreover, by 1979 around 85% of the ESF's resources were being allocated to regions with priority status.

In conclusion whilst the E.S.F. can be seen to be progressively favouring the less-developed regions<sup>2</sup>, the type of aid is essentially passive in nature, and should be used in coordination with other structural instruments to obtain maximum effect. The system of integrated operations introduced by the Commission in 1979<sup>3</sup> (although still in a trial stage) is surely a step in this direction, and will hopefully allow a somewhat better and more specific matching of regional problems and policies.

At present, and at a regional level the major instruments of the E.S.F. concern vocational training and aids by way of temporary wage supplements to newly recruited workers or income

<sup>1</sup>European Perspectives(1981), op.cit., p. 234.

<sup>2</sup>In practice the regions eligible for assistance under the E.R.D.F.

<sup>3</sup>See ibid., pp. 238-9.



supplements to the unemployed or short-time workers. (In general, Articles 3(2), 3(3), Regulation EEC no. 2396/71.) On the other hand, it should be pointed out that the EC Commission has been slow to establish programmes which touch on the subject of income-maintenance except in very special circumstances<sup>1</sup>.

In fact, the measures proposed by the Commission (and adopted by the Council in July 1975) concerning the social action programme in the field of pilot schemes and studies to combat poverty, can only be described as minute (around 20m. EUA from 1975-80) compared to the size of the problem, and neatly avoid the question of direct income supplements. It should be noted however that these projects represent only a tentative first step in dealing with what is essentially a partially understood and multi-faceted question.

Aid under the social action programme falls into four categories<sup>2</sup>:

- (i) renovation of particularly poor urban areas;
- (ii) meeting needs of social groups which are particularly poor or threatened with poverty;
- (iii) reorganization of special services to help poor persons and their families;
- (iv) adapting existing social services more closely to the specific needs of poor people.

In view of the results of our surveys in chapter 2 we should perhaps stress that, whilst poverty is induced by a number of causes and characterized by a number of factors, some of which may be remedied by measures aiming at improving job opportunities or living conditions, in most cases the source can be traced to inadequate incomes (especially in agriculture) and in particular to state transfers (especially in pensioners, large families, unemployed). At some point, any programme which aims at relieving poverty in Europe cannot avoid the question of dealing directly with poverty and the individuals concerned.

<sup>1</sup>An example being the supplementary Welfare Allowance Scheme in Ireland (only 25% financed by the E.C.), see E.P., "The effects on Ireland of membership of the E.C.", June 1979.

<sup>2</sup>"The social policy of the E.C.", European Documentation, 1981, p. 36.

This would however pose a considerable budgetary problem, both for political and financial motives, but cannot be avoided if the problem of poverty is to be dealt with directly. Moreover, given the very marked geographical concentration of poverty in Europe (see Ch. 2), the result would be inter-state transfers rather than merely transfers between social groups, and therefore presents a general budgetary problem (see ch. 10.3).

#### 10.4.4. The Common Agricultural Policy -- an introduction to the questions involved relating to regional development.

Whilst at an early stage it had been proposed that the guidance section of the EAGGF should play a major role together with other policies in the overall development of the problem agricultural regions of the Community<sup>1</sup>, the results up to now have been disappointing and the link between the EAGGF and regional development policy remains particularly weak.

The aims of the C.A.P. outlined under Article 39(1) of the Treaty, although not specifically related to regional development, do imply that the C.A.P. should be consistent with granting a fair standard of living to the agricultural population<sup>2</sup>. Article 39(2) states that in implementing the C.A.P., account should be taken of differences in structural and natural disparities between the various agricultural regions, and the need to effect the appropriate adjustments by degrees.

Overall, the C.A.P. comprises a number of objectives and instruments, not all of which are fully compatible or consistent with each other. Perhaps the most obvious aspect of this problem concerns agricultural incomes, and there is a clear dichotomy of interests between on the one hand avoiding structural surpluses and on the other promoting farm incomes. For example,

---

<sup>1</sup>See, for example, O.J. C90, of 11.8.1971. Commission memorandum to the Council regarding the coordination of and proposals for regional development measures in the priority agricultural regions.

<sup>2</sup>Other aims include: the achievement of increased productivity in agriculture and the optimum use of factors of production, market stability, fair prices to consumers and the assurance of availability of supplies.

under one estimate, around 75% of the increase in income through work in agriculture derives from the increase in surface area cultivated per worker and only 25% results from increased productivity<sup>1</sup>. This in turn implies that attempts to raise agricultural incomes through the price system and via increased output are likely to be rather costly. As one report put it,

"the principal difficulty encountered by the CAP is the lack of sufficiently adequate controls to adapt production to conditions of the internal (self-sufficiency levels) and external market. Since the CAP depends essentially on a mechanism which supports agricultural income through guaranteed prices or aid directly linked to the product, the continuing increase in output creates an uncontrollable increase in expenditure."<sup>2</sup>

One suggestion, in order to alleviate the income effects of present budgetary constraints on agricultural price levels, has been to introduce a system of direct aids to agricultural incomes (not linked to products)<sup>3</sup>. This would have several advantages, namely (i) that of leaving agricultural prices their role of economic indicator with no distortion of the optimal combination of factors of production, and (ii) that of avoiding aid being nullified by a corresponding rise in factor costs and the price of final products.

According to the previously mentioned study such a policy would be prohibitively expensive<sup>4</sup>. The study estimate, however, would seem to be much too pessimistic given the generally high incidence of part-time farming, especially for smaller farm sizes, and the recourse to alternative non-agricultural employment characteristic of many regions (see Ch. 2). Whilst, as such, the indiscriminate levelling of farm incomes (independent of the amount of work performed), has little economic justification and could act as a disincentive to find alternative forms of employment, on the other hand it must be recognized that in

<sup>1</sup>E.C. "Study of the regional impact of the Common Agricultural Policy", Regional Policy Series no. 21, 1981, p. 85.

<sup>2</sup>COM(800) 80 final, "Reflections on Agricultural Policy".

<sup>3</sup>See E.C., "Study of the regional impact of the CAP", 1981, p. 90/1. This is not to be confused with, for example, the direct aid granted per livestock unit under the mountain and hill farming directive, 75/268 (see on).

<sup>4</sup>Ibid., p. 91; around 10,000 million UA to achieve the target minimum of 75% of average E.C. agricultural income (in 1976/77).

many cases, particularly in certain mountain and hill farming areas, and especially for older farmers, no realistic alternative may often exist<sup>1</sup>. In this respect therefore, and under the condition that they form part of well-defined programmes<sup>2</sup>, there is a good case to be made for direct aids of the sort described above, as they would provide a much more efficient means of support than either subsidies related to products (e.g. Regulation 75/268 -- see also Ch. 2) or price support<sup>3</sup>, from which the less well-organised and smaller-scale farms are least likely to benefit.

The argument for direct income support is furthered by the findings of the aforementioned study of the regional impact of the C.A.P. which concluded that whilst C.A.P. mechanisms have contributed generally to maintaining a growth rate of agricultural incomes equal to that of other sectors (from 1968-78), in general, regional imbalances in agricultural incomes were aggravated over the period considered (1964-77), and, on the whole "the CAP does not seem to have been able to improve the situation of less favoured regions at the agricultural level."<sup>4</sup> In conclusion, whilst a policy of price support, giving more aid to those who produce more may be largely acceptable in a situation of deficit, it is certainly open to criticism in a period of surplus and it may then be argued that "the direction of expenditure ... should lead more to establishing balance in support for farmers in accordance with their respective income level."<sup>5</sup>

---

<sup>1</sup>For example, it has been estimated that around 60% of smallholders in S. Italy have only part-time occupation in agriculture and no activity in other sectors. Ibid., ff. p. 78.

<sup>2</sup>One example of a redistributive measure within the CAP price system is the co-responsibility levy on milk production, which, if recent Commission proposals are carried through (see Le Monde, 25-26 Oct. 1981), will act as a progressive tax on milk production and increases in output.

<sup>3</sup>One criticism of direct support has been centred around the administrative problems it could present (E.C., "Improvement of the CAP", European Community, Nov. 1973). These are certainly not to be underestimated, not least because of the practical non-existing national programmes (agricultural or not) especially in some of the poorer member states (see ch. 2).

<sup>4</sup>E.C. 1981, op. cit., p. 86.

<sup>5</sup>Ibid., p. 72.

Although no clear proof emerges as to whether or to what extent the CAP has been responsible for the abovementioned regional imbalances, two clear statements can be made<sup>1</sup>:

- (i) that the supports for agricultural production proportional to volume produced and the higher support given to milk, cereals and sugar have above all favoured the large and medium size farms of Northern Europe
- (ii) the weakness of socio-structural policy to develop supports for production in regions of Southern Europe and the lower support given to fruit and vegetable type products have served to maintain the relative poverty of these regions.

Hence, whilst on the one hand the present system of guaranteed prices may be favourable to achieve increases in output, on the other hand it can largely be said that is it not, at the same time, capable of promoting either regional balance in farm incomes or redressing imbalances in agricultural structures. As one author (Ritson 1977, p. 354) has pointed out, whilst the European Commission proposals for the reform of the CAP rejected direct income support on the grounds that it would hold up structural improvements, there is no reason to suppose that the outcome would be more onerous in this respect than support given via the market. The contrary may indeed be the case if price support gives false expectations concerning long-run farm viability.

Regarding the last two issues, coordinated structural policy can be seen as the only solution to low incomes in agriculture which attempts to deal with the causes rather than the symptom of the problem (Ritson 1977). It is certainly doubtful whether the problem of agricultural incomes can be solved as long as the basic structure of the sector remains deficient.

---

<sup>1</sup> Ibid., p. 81, see also Map 5, p. 38, vis. estimates of total EAGGF expenditure (1976/77) by region, per person employed in agriculture -- clearly disadvantaged regions include, the West & Midlands of Ireland, the South of France and most of Italy.

Structural policy in agriculture therefore needs to concentrate on two issues; firstly, on measures directed towards increasing farm-size and thereby raising efficiency through improving the allocation and use of resources, capital in particular; and secondly, but linked to the first point, measures aimed at reducing the farming population with a view to making land available for redistribution into larger or less fragmented units.

The success of these measures will largely depend on the extent to which the agricultural population can be induced to leave farming (retirement or transfer to other sectors of the economy) and the use that can be made of the subsequently available land.

A number of aspects of this process are worth considering in more detail since they will be important in assessing the present structural policy of the C.A.P.

In the first place, it is generally recognized that the rate of decline of the agricultural working population bears a close and inverse relationship to the growth of non-agricultural employment<sup>1</sup>. This implies that measures to improve the regional economic environment and promote employment in in-

---

<sup>1</sup>Economie et Statistique no. 101, 1978, Table 1, p. 38, notably, "lorsque les créations d'emplois sont vives l'exode agricole s'accélère, alors que pendant la crise l'agriculture semble constituer un refuge pour l'emploi". Ibid., p. 37.

industry and services are likely to have an indirect but important and positive effect on the development of agricultural structures, incomes and productivity. This effect would certainly be increased if, in particular, inter-sectoral linkages with agro-industries were encouraged, which could furthermore induce supply effects in the agricultural sector.

In this respect, two observations should be noted<sup>1</sup>, namely, (i) that regions characterised by low agricultural incomes are located mainly in areas of unfavourable economic development (low income and regional growth levels), and (ii) that the greater the share of agricultural working population in regional employment, the lower the agricultural income per worker.

This brings us to our second consideration, which concerns regional growth and its impact on the development of agricultural incomes. In this respect the existence of a close positive relationship between the decline in agricultural employment due to take-up in more productive sectors and growth in agricultural and overall (regional) per capita income has been postulated on theoretical and empirical grounds by a number of authors (see Bull, 1978). However, evidence for Italy in the 1960s and early 70s, would seem to suggest firstly that employment transfer to other sectors has been particularly low and secondly that improvements in agricultural incomes may have arisen more from the exodus of small-scale farmers -- accompanied by a fair degree of land abandonment -- than from any particular improvement in the use of resources (Bull 1978).

<sup>1</sup>E.C., "Study of the regional impact of the CAP", p. 77/78.

The improvement in agricultural income per worker resulting from this process may therefore exist more in a "statistical" than in any "real" sense, being essentially due to the elimination of least-productive producers. In other words, a high regional growth rate would appear to be a necessary but not a sufficient condition for the improvement of agricultural incomes and structures.

The third consideration on structural policies concerns the cost of improving agricultural structures. Practice, and French experience in particular has shown that areas in which farming is already well-established and structures relatively sound, prove to be the most profitable and easy areas of intervention (for regrouping or consolidation and structural improvement), when compared to more disadvantaged agricultural zones<sup>1</sup>. At a national level, also, such factors have doubtless retarded the implementation of structural policies in agriculture in accordance with E.C. directives (e.g. Italy -- see on). The general corollary is that unless social, regional as well as environmental considerations are specifically at the basis of structural policies, the latter are likely to find greater use in regions where structures are relatively good and the less-developed agricultural regions are least likely to benefit.

#### 10.4.5. The EAGGF Guidance budget and expenditure.

Whilst the aim of the C.A.P. Guidance price support and intervention is essentially to guarantee a fair standard of living to competitive agricultural holdings, that of the Guidance budget is to correct regional handicaps in production, trade and processing.

Whilst recent developments in C.A.P. socio-structural policy, especially those concerning aids to the Mediterranean

---

<sup>1</sup> See for example Clout (1973), pp. 30-32 with respect to consolidation & farm improvement in the Massif Central. Whilst the low cost of land in disadvantaged areas often tends to facilitate the process of consolidation (e.g. S.A.F.E.R. activity in France), speculation in real estate has often eliminated this advantage, by pushing up land prices.



regions, promise a more active and regionally oriented involvement in agriculture for the future, it must be recognized that up to now, involvement in structural policy has proved to be little more than a token gesture, with "no more than a minor effect in restoring structural imbalances in regions over the years 1964-77."<sup>1</sup> Structural expenditure as a proportion of the total EAGGF budget decreased from 15% in 1964 to 3% in 1978<sup>2</sup>. Moreover, partly due to difficulties encountered in making disbursements for individual projects (effected only after actual completion), commitments began to pile up, at one point reaching some 3,155m. e.u.a. or 77% of all the appropriations (1965-79) in question<sup>3</sup>.

Community agricultural socio-structural policy has evolved in four stages<sup>4</sup>: (i) policy for financing individual projects, (ii) the Mansholt directives of 1972, (iii) the first structural regionalisation measures in the form of aid to less favoured areas, and (iv) the new (regional) structural policies for specific areas and problems.

The corresponding aids are summarized as follows:

(i) Individual projects (Regulations 17/64, 355/77).

For a long time the Guidance Fund financed only individual projects related to improving structures of production, marketing and processing. This was accomplished in the framework of national quotas and involved investment subsidies, generally up to a maximum of 25%. The impact of this measure was particularly weak given substantial gaps between approvals and payments, and overall, less than 1,000m. u.a. was paid out over a period of 14 years. A new regulation concerning the processing and marketing of agricultural products replaced regulation 17/64 in 1977. Projects in South

<sup>1</sup>E.C."Study of the regional impact of the CAP", 1981, p. 40.

<sup>2</sup>Ibid.

<sup>3</sup>European Perspectives, 1981, op.cit., pp. 234-5.

<sup>4</sup>Figures and information taken from E.C."Study of the regional impact of the CAP".

of France and Italy received higher rates of subsidy of 35% and 50% respectively.

(ii) Mansholt directives (159-61/72)

In 1972 three directives were adopted with the aim of rationalizing farm structures in the medium to long term and ensuring a fair income and working conditions for those continuing in the agricultural sector, with a view, in particular to achieving price cuts on surplus commodities<sup>1</sup>.

(a) aid to modernising agricultural holdings

This measure was designed to assist investments in farming which, within the context of a development plan, would help to establish structures capable of providing an income at least comparable with the average regional reference wage.

Over the period 1973-77, almost 78,000 plans were approved. Of these less than 11,000 were located in less favoured regions in spite of the fact that the latter accounted for around 45% of all agricultural holdings. France and more notably Italy have been slow in applying this directive -- by 1977 only 3,300 plans had been approved in France (of which around one third in the less favoured regions), and none in Italy.

(b) Incentives for withdrawal from agricultural activity

Whilst the aim of this directive was essentially to complement aids to structural improvement providing an incentive for farmers over 55 years of age to retire, and releasing land for enlargement and improvement, its implementation has remained very restricted. So far it has only affected some 37,000 recipients, releasing less than 500,000 hectares of which only 14% have been taken over by farms in receipt of development plan aid. Surprisingly, countries with the largest proportion of the

---

<sup>1</sup>See, European Commission, "Memorandum on the reform of agriculture in the EEC" (Mansholt Plan), 1968.

agricultural working population in the highest age groups have benefitted least from this measure (Ireland and Italy).

(c) Aid for the provision of socio-economic information and vocational training for persons working in agriculture

This measure was intended to complement (a) and (b), but up to 1978 was carried out only to a small extent. Here again, Italy and Ireland have yet to implement the directive.

(iii) Aid to mountain and hill agriculture and to certain less favoured agricultural areas<sup>1</sup> (75/268)

The objective of this measure was to maintain agriculture in areas suffering from special handicaps and help prevent depopulation through means of selective income maintenance.

The modus operandi whereby each country fixes the amount of aid to be granted per livestock unit, tends to result in substantial differences in aid levels as between farm sizes and between countries, in spite of the fact that the Guidance Fund rate of reimbursement is somewhat higher (35%) for Ireland and Italy than for other countries (25%). In 1977, for example, the U.K. received around 40% of total aid granted and a level of grant per farm three times the E.C. average.

(iv) New guidelines of Community structural policy (1978-81)

In 1978/9, the Council approved a series of measures under the form of regional programmes in an attempt to deal more directly with the problems of the less favoured regions.

(a) Aid to Mediterranean areas and the west of Ireland

Aid under this programme is mainly aimed at selected infrastructure projects such as irrigation (S.Italy, Corsica), reconstruction and restructuring of vineyards (S.France), drainage (Ireland), afforestation<sup>2</sup>, and improvements in rural infrastructures. The rate of Community assistance varies between 25% and 50%. The above measures are intended to remove natural and structural

<sup>1</sup>Around 25% of surface area, 15% of farms and 12% of E.C. output.

<sup>2</sup>Covered by a separate regulation concerning common measures for forestry in certain Mediterranean areas of the Community (OJ L38, of 14.2.1979).

bottlenecks to agricultural development and are complemented by (i) further aids to withdrawal from agriculture and increased community participation in selective income-maintenance (now 50% in certain areas of Italy and Ireland) and (ii) the introduction of specific regional programmes in an integrated framework (RDF, Social Fund, EAGGF) and adapted to local situations.

Several conclusions are to be drawn from the above accounts.

In the first place the Guidance Fund, at its present level can only have a very limited impact given the magnitude of the problem; and consequently the regional effect of the CAP is therefore likely to be dictated mainly by prices and market policies. Furthermore, budget estimates for 1981-83 Guidance expenditure come to no more than 5% of the EAGGF total which gives an indication of priorities for the near future.

Secondly, the fact that often, countries with the most serious structural problems in agriculture have been the slowest to implement the above E.C. directives casts some doubt on the probable impact of the aids in question.

In this aspect, there are obvious arguments for providing higher rates of Community participation in priority projects and regions, not least because countries where agricultural structures are weakest are often in a less advantageous position to finance such projects.

Moreover, in some respects the problem probably goes even deeper; in particular it could be asked whether income-support measures for farmers on a larger scale than at present are likely to be seen as either practicable (administrative complexity) or equitable (e.g., what about low-paid farm workers).

A further complication is that, in general, income-maintenance programmes in the regions most concerned by these problems are often deficient if not inexistent (see ch. 2). A more consistent and less piecemeal approach would be to operate such benefits under an integrated Community social security system -- an approach which, however, the Community, for the present, seems intent to avoid.

#### 10.4.6. Some general remarks on the Funds

Apart from the more specific comments made on the individual funds up to now, it is worth considering briefly some more general aspects of Community financial participations in investments. Some key figures and relationships are given in the table below for 1977.

Assessment of the impact of these funds is particularly difficult, but moreover as the table below shows, the matter is further complicated by the fact that incidence of these aids (ratio of E.C. aid to investment or project costs) varies considerably between the various funds, and countries concerned.

	(a)	(b)	(a) as % (b)
Funds	Amount of investment grants*	Investments financed*	
EAGGF	249,017	n.av.	
ERDF industry & services of which:			
(i) productive investment	208,239	2,520,053	8.3
			WG : 2.9%
			France : 6.2%
			Italy : 15.5%
			UK : 10.8%
			Ire : 11.1%
(ii) infrastructure	274,303	1,898,524	14.4
			WG : 19.7%
			France : 29.7%
			Italy : 15.7%
			UK : 9.0%
			Ire : 24.6%
(c) amounts of loans			
EIB	1,352,530	6,078,870	22.2
			WG : 7.6%
			France : 11.2%
			Italy : 31.5%
			UK : 34.5%
			Ire : 43.8%

\*E.C. funds; expenditure and associated investments, 1977, 1,000 EUA. Source: derived from Eurostat Regional Statistics; Community's financial participation in investments, July 1978.

Given the complexity of the factors involved, it is of course difficult to tell what the precise relationship is between aid incidence and impact. However, with incidence figures as low as 2.9% (W.G., ERDF), one is compelled to ask if the particular EC fund in question has played any decisive role in determining whether the investment took place or not. Again, average figures as high as 30% (France, ERDF, infrastructures), particularly concerning infrastructure investment where state or local authority spending is also concerned, many raise doubts as to whether spending is fully consistent with principles of additionality<sup>1</sup>. On this account the U.K. government has received much criticism, culminating recently in the European Parliament budgetary committee taking the unprecedented step of voting to withhold half of the U.K. ERDF allocation for 1982.

Differences in incidence levels are of course also due to the nature and the complexity of the problem involved, and the type of E.C. intervention. Hence, the relatively high figures for the incidence of EIB lending in Italy and Ireland must be seen in the context of the various problems of raising capital in these countries and the nature of the projects concerned. Moreover, EIB operations which essentially transfer capital funds must clearly be assessed in a different manner from funds where there is a grant element.

Some points in our preceding discussion are brought out in recent Commission proposals for the modification of Community policies<sup>2</sup>.

Taking account of various observations as to the working of

---

<sup>1</sup> See for example, House of Lords, 13th Report, Select Committee on the European Communities, EEC Regional Policy, "the public authorities normally retain the ERDF assistance towards infrastructure costs although, because of central government control of capital expenditure, there can be no corresponding increase in expenditure...", Art. 4 para. 1.

<sup>2</sup> Rapporto della Commissione delle C.E., al Consiglio in esecuzione del mandato del 30 maggio 1980. Boll. suppl. 1/81. For further elaboration of these proposals see interview with A. Giolitti, Guardian, 22.10.1981. See also, E.C. COM(81)639 final/2 "Pour developper l'industrie en Europe: une strategie communautaire".

these policies, namely:

- given limited resources, that funds are being spread too widely both in geographical terms and with respect to projects (esp. infrastructures);
- that a greater effort should be made to incentivate productive investment and job creation particularly with respect to growth industries (new products and services) and helping to foster small/medium sized firms;
- that problems of additionality in the way certain funds operate may ultimately reduce their overall impact;
- that the present range of E.S.F. activities in particular should be reviewed with the aim of rendering them less administratively complex and more directly related to the process of job creation.

The Commission would recommend the following general lines for reform<sup>1</sup>,

(i) that national quotas for the bulk of E.C. regional aid be removed and the money concentrated on regions with particularly serious structural problems

(ii) that in future the E.C. would want to negotiate legal contacts for regional development programmes (as at present occurs under the non-quota system) with national governments and regional authorities, instead of merely reimbursing national spending on regional aid with little assurance that the E.C. funds will effectively be additional

(iii) more direct involvement with regional bodies responsible for development policy, which would directly identify E.C. aid with the regions, and would help ensure the principle of additionality at this level<sup>2</sup>

(iv) that the non-quota section of the ERDF should be expanded considerably (up to 20%), enabling a greater concentration of resources notably in the poorest regions of the E.C. and those suffering from industrial decline. In particular, changes in the working of the ERDF should lead to its passage from a system of aids to isolated projects, to a new system of co-financing regional programmes in infrastructure and productive investment into which individual projects supported by the Community would be integrated

(v) specifically, and related to (iv), if on the one hand it is possible to increase the volume of Community financing in the form of loans, this should not result in a lowering of their impact. Particular attention should be paid to:

<sup>1</sup> See also Bull. Vol. 14, no. 10 1981, pp. 8-10.

<sup>2</sup> See Evidence of the Development Board for Rural Wales, (DBRW) House of Lords, 14th Report of the Select Committee on the E.C., p. 101 and 108; "The rule of 'non-additionality' operated by the U.K. Government means there is little incentive for the D.B.R.W. to seek, or promote others to seek, ERDF assistance for projects".

- small and medium sized enterprises
- interest-rate subsidies in priority regions in favour of large infrastructure projects
- expanding the utilization of loans facilities in combination with structural funds, such as the ERDF. The latter for example is already in a position to provide interest subsidies on EIB loans.

Whilst the above changes might partially solve some of the problems associated with the present funds in terms of (i) additioriality, (ii) impact, (iii) administrative complexity, a number of points remain to be answered.

In particular, with respect to Community enlargement, if the E.C. is to get to grips with the severe regional imbalances within the prospective member countries, and between these countries and the rest of the Community<sup>1</sup>, then it will have to develop greater involvement and a more positive approach towards guidelines and instruments relating to regional development.

Moreover, regional policy in Greece and Portugal is still very much in its infancy, and would probably benefit from more positive guidelines towards policy-making and institutional and administrative organisation on the part of the Community.

Indeed, if the ERDF is to play a larger role in regional development, there are good arguments, as we have seen, for integrating it, and other funds, more fully into national development programmes. In an institutional framework this would call for more direct and coordinated action through national development agencies on well-defined programmes.

On the latter question it should be considered how the attempt to provide a more comprehensive and integrated approach to regional development aid would fit in with recent Commission proposals on the coordination of industrial policies. Indeed, if the Commission proposals<sup>2</sup> for more concerted efforts (and financial intervention by the Community) in energy, research and development and industrial innovation, are to be realised, there would certainly be considerable regional implications, not only because of differing national or regional capacities to finance such pro-

---

<sup>1</sup>See European Economy, no. 9, July 1981.

<sup>2</sup>COM(81)639 final/2, op. cit., esp. pp. 9, 11, 25.



grammes, but also and primarily, because of the spatial distribution of such activities themselves (see ch. 5). Previous chapters have already emphasized the need to develop positive adjustment measures to promote industrial innovation, and restructuring. In this respect policies to promote research and development and improve access to finance, in particular for small/medium sized firms in l.d.r.'s where these bottlenecks are hardest felt, could well be fully integrated into Community policy rather than being carried out on a piecemeal basis as largely occurs at present<sup>1</sup>.

On the other hand whilst the Commission has also suggested<sup>2</sup>, albeit in vague terms, that the Community give special support to developing and applying new technology, and at the regional level to encouraging labour-intensive activities in such sectors<sup>3</sup>, little attention is given to the details and even less to the precise reasoning involved. Whilst it may certainly be desirable to speed up the process by which new technologies are absorbed, direct state intervention is, other objections apart, often a risky business (e.g. over-capacity, of which there are many examples), and probably more so if labour-intensive activities are to be picked out for support<sup>4</sup>.

One further element of development policy, not touched upon by the Commission relates to location controls. Whilst a number of Member States have found it necessary to implement such policies in congested areas and as part of an overall regional planning strategy, no attempt as yet has been made by the Commission to coordinate such policies or to propose guidelines. In so far as location controls relate primarily to national boundaries and objectives, and very often entail a fairly delicate process of

---

<sup>1</sup>See e.g. E.C. Bull. no. 6, 1981 on schemes vis Bavaria and Emilia Romagna (points 2.1.33 and 2.1.38 respectively).

<sup>2</sup>Suppl. Bull. 1/81, pp. 10,11.

<sup>3</sup>See Bull. 7/8 1981, point 2.1.59.

<sup>4</sup>That is, apart from the question of whether it is particularly desirable to direct these activities to the development areas in the first place - see discussion in ch. 5.

bargaining between the firms themselves and the authorities involved, there are certainly reasons for leaving such policies in the hands of the respective national governments<sup>1</sup>. However, insofar as internationally mobile investment is concerned, location controls may become a question for Community-wide concern. Previous chapters have already pointed to the growing importance of the MNE in regional development, and it is notable that many of the new or potential members of the E.C. (Greece, Spain, Portugal) have experienced industrial development typically characterised by a high level of dependence on such enterprises<sup>2</sup>. The consequences of this phenomenon, by which MNE's may effectively be able to bargain for better deals with national authorities, suggests that some coordination of instruments affecting internationally mobile investment might be desirable. A coherent Community policy towards the MNE would furthermore go a long way towards preventing the unnecessary and artificial inflation of incentives at the periphery to attract these firms (which are generally in the least need of such favourable treatment). The situation where some of the most profitable enterprises operating in Europe are also in receipt of some of the most substantial levels of subsidy, to establish themselves in locations that are perhaps no different from what they would have chosen anyway, is one that certainly begs a number of questions.

A final point in relation to the above arguments concerns the need for continuous monitoring of industrial structure and changes therein (e.g. takeovers/mergers) at a regional level. This can be seen as an essential prerequisite for policy formation (see

---

<sup>1</sup> Although as the MacDougall Report, 1977, pointed out there is a logical case to be made for introducing a fiscal complement to the E.R.D.F., "taking the form of a tax on new investments in regions fulfilling criteria that were the inverse of those used for eligibility for regional aids (e.g. centrally located agglomerations with labour shortages, high income levels, high levels of congestion etc.)", op. cit., vol. 1, p. 65.

<sup>2</sup> See Seers et al. (1979), chs. 8, 9, 10.

ch. 5), and up to now one which has received far too little attention in assessing the qualitative and quantitative aspects of regional development and new job creation.



BIBLIOGRAPHY

- M. PARKIN (1972) "An overwhelming case for EMU"  
The Banker, September 1972
- (1973) "European and World Money", The Banker, January 1973
- W.M. CORDEN (1972) Monetary Integration, Essays in International Finance, no. 93 Princeton
- R.A. MUNDELL (1961) A Theory of Optimum Currency Areas, A.E.R. (51), pp. 657-664.
- ARMSTRONG & TAYLOR (1978) Regional Economic Policy and its Analysis
- B. ASHCROFT & J. TAYLOR (1979) "The effect of regional policy on the movement of industry in Great Britain", in Regional Policy -- past experiences and new directions, Martin Robinson, 1979.
- I.F. PEARCE (1974) "Some Aspects of European Monetary Integration", in Issues in Monetary Economics, Johnson & Nobay, O.U. Press
- J. VAIZEY (1975) Economic Sovereignty and Regional Policy
- P.M. TOWNROE (1972) "Some Behavioural considerations in the industrial location decision", Regional Studies
- DIXON & THIRLWALL (1975) Regional growth and employment in the U.K.
- W. MOLLE (1977) "Industrial mobility -- an analysis of industry from Amsterdam", Regional Studies
- D. CURRIE (1976) "Some criticisms of the monetary analysis of balance of payments correction", E.J., September 1976
- W. ROBINSON et al. (1979) "The influence of exchange rate changes on prices: a study of 18 industrial countries", Robinson, Webb & Townsend, Economica (46), pp. 27-50.

- R.N. COOPER (1971) "Devaluation and aggregate demand", in Bhagwati, Jones, Mundell, Vanek (eds.), Trade, balance of payments and growth
- W.M. CORDEN (1977) Inflation, exchange rates and the world economy
- R. DORNBUSH (1973) "Devaluation, money and non-traded goods", A.E.R. December 1973
- M.V.N. WHITMAN (1975) Global monetarism and the monetary approach to the balance of payments, Brookings
- H.G. JOHNSON (1977) "The monetary approach to balance of payments theory and policy", Economica (44)
- O. AUKRUST (1970) "PRIM 1 -- A model of the price and income distribution", The Review of Income and Wealth, 1970
- J. HORNE (1979) "The effect of devaluation on the balance of payments and the labor market: the U.K., 1967", Economica (46)
- J.R. PRESLEY (1976) Currency Areas, J.R. Presley & E.J. Dennis Macmillan
- J.M. FLEMING (1971) "On exchange rate unification", in Fleming, Essays in Economic policy
- P. DE GRAUWE (1975) "Conditions for Monetary Integration -- a geometric interpretation", Weltwirt Archiv 1975(4), pp. 634-646.
- R. DIXON (1973) Studies in the structure and growth of regions in the U.K., Univ. of Kent Ph.D. dissertation
- M. FRIEDMAN (1968) "The role of monetary policy", A.E.R.
- H. GRUBEL (1967) "Intra-industry specialisation and the pattern of trade", Canadian Journal of Economics and Political Science (22).
- D.E. LAIDLER (1972) Price and output fluctuations in an open economy, University of Manchester

- O. EMMINGER (1979) "The exchange rate as an instrument of policy", Lloyds Bank Review, July
- M. HODGES & W. WALLACE (1981) Economic Divergence in the European Community, London, for the R.I.I.A.
- P. ROBSON (1980) The Economics of International Integration, London
- C. RITSON (1977) Agricultural Economics -- Principles and policy, London
- G.H. BULL (1978) An assessment of Italian post-war regional policy, University of Exeter, M.A. dissertation (unpubl.)
- H. CLOUT (1973) "The Massif Central", series Problem Regions of Europe, Oxford University Press





### Conclusions

In the introduction to this work we established the methodology which would be adopted and the questions to which we addressed our analysis. In answering these questions it is apparent that five broad subject areas emerge; in the first place, we attempted to define and quantify the nature and extent of the regional problem. In searching for an explanation of regional disparities we examined, in the second place, the relationship between regional structure and growth; thirdly we examined the pattern and characteristics of regional development. Related to the above points, in the fourth place, we extensively considered the empirical and theoretical questions surrounding the use of regional policy in its aim of improving economic structures in the less developed regions (l.d.r.'s) and promoting regional economic growth. Lastly, we considered whether the process of European integration could be seen to have influenced the pattern of regional development, and we examined the role of the l.d.r.'s in the increasingly integrated European common market. The role of the European Community and the structure of the Community budget was critically examined in the light of past, and possible future developments.

Whilst more detailed comments are to be found in the summaries to individual chapters, we must now conclude by outlining, in the context of the five areas mentioned above, the main conclusions and policy recommendations reached in this study.

#### 1. The regional problem in the E.C.

i) The regional problem is characterised by significant and persistent spatial disparities in levels of economic development. The economic position of the l.d.r.'s in general appears to be influenced mainly by national as opposed to Community wide developments and within countries the relative position of l.d.r.'s has often remained very largely unchanged over quite a number of years. However, the circumstances surrounding such developments vary from case to case.

ii) Growing pressures towards disparities via developments in regional labour markets could be observed in a number of cases. In this context, three broad categories of l.d.r.'s could be defined;

- a) regions (often the least peripheral) which appear to have benefitted to some extent from the gradual 'spread' of industrial activity, and where demographic trends were favourable in terms of a balanced regional labour market,
- b) regions with poor economic performance and unfavourable demographic trends leading to excess supply in the regional labour market,
- c) regions showing evidence of a cumulative decline in economic activity, population and employment (mainly France, Massif Central)

iii) In general, great difficulty was encountered in assessing whether relative trends in regional incomes were mainly the result of allocative factors such as improvement of competitiveness and output, or essentially redistributive factors such as public capital expenditure, inter-state transfers or welfare benefits of one kind or another. In a number of cases, the persistence over quite long periods of relatively sizeable trade-gaps in the l.d.r.'s, led us to conclude that such transfers, whilst often substantially reducing income disparities as between regions, had very little perceivable impact on the economic performance of the l.d.r.'s themselves. Undoubtedly however, disparities would have been even more marked in the absence of such transfers.

iv) Both within and between regions, wide disparities in the economic welfare of individuals or socio-economic groups were particularly apparent. Such disparities were especially marked in the case of the l.d.r.'s which were characterised by high rates of poverty as compared to the respective national situations.

a) In spite of the existence of real growth over the 1960's and 1970's, and of income-maintenance programmes towards the unemployed, pensioners, and families with dependents, there was found to be conclusive evidence that very substantial and diverse groups in society remain firmly at the bottom of the income distribution. This applies not only in relative terms but, more importantly, in terms of absolute levels of disposable income or consumption representing what can be considered to involve a substantial degree of deprivation. Whilst there were a number of explanations put forward (eg. low-earnings, family size) the fact remains that a direct and very important cause of poverty in a number of cases could largely have been avoided if there had been a greater degree of redistribution involved in national income-maintenance benefits (as oppose to any substantial increase in overall expenditure as such on these programmes).

b) At the E.C. level, three broad lines of action directly relevant to the poverty problem may be suggested:

-- Community led efforts to coordinate national income maintenance benefits with respect to coverage, levels and procedures. Whilst the introduction of some European minimum-guaranteed family income would probably be desirable, it would almost certainly prove to be politically unfeasible. Some compromise based partly on average earnings in the respective countries could however provide a useful and feasible alternative,

-- resulting from the above, some contribution by the Community to help the less well-off member states meet any extra expenditure involved,

-- some statistical basis at a comparative and Community level to enable periodic analysis to be made of the extent of low-incomes and poverty. Con-

-sumption surveys, based for example on Italian practice, would prove especially valuable in comparing real standards of living between countries and regions.

## 2. Regional structure and growth.

i) From a theoretical viewpoint, there were found to be few convincing arguments to suggest that, at a spatial level, there can in general be assumed to be some 'natural' equilibrating or convergent tendency in the process of economic development. On the basis of the growth model outlined, regional growth rates were seen to depend in a fundamental sense on the structure of regional output. Whilst a disequilibrium situation was seen to be unlikely, the persistence of different growth rates, where as evidence showed, l.d.r.'s start from the bottom, is disturbing enough in itself. Supply factors were seen to be of vital importance here in bringing about changes in regional structure, and hence, the possibility of overcoming low or lagging regional growth rates. The importance of regional policy in encouraging such changes was seen to be central.

ii) In many instances the economic performance of the l.d.r.'s could be traced to structural factors which clearly limited or otherwise influenced the development potential of such areas. Economic structure is in general characterised by high but declining levels of agricultural employment, relatively low levels of industrial employment, and a tertiary sector often exhibiting marked deficiencies in certain sub-sectors. Within each of these sectors, structures are characterised by a range of deficiencies in a number of respects ;

-- In many cases the farming sector was found to be in real need of improving agricultural structures (farm-size, infrastructures). However, the persistence of near subsistence farming and the lack of ready employment alternatives, implies that efforts to restructure this sector should not overlook the potentially serious social and economic consequences that such rationalisation might induce.

-- In the service sector, the generally weak urban framework of the l.d.r.'s together with the relatively low level of induced demand (especially viz. business services) by newly located externally-based firms, creates little prospect for the successful longer term development of such activities unless specific efforts are made to encourage movement, in particular of business related services, to these areas (or other inducements to ensure greater local placement of demand for such services).

-- Employment in industry in the l.d.r.'s was generally below the Community average. In the past, industrial development has been characterised by relatively high rates of employment loss (and closures) in smaller scale firms often in more 'traditional' lines of production. More recently, and linked to this point, there appears to be a general tendency in many development areas towards higher levels of external ownership of the regional industrial base.

Factors of the type mentioned above must go a long way in explaining the static or negative growth rates of total employment common to most l.d.r.'s over the 1970's. Moreover, these events are likely to be compounded in the future by demographic problems in many areas - high birth-rates, immigration, rising dependency ratios and general mismatch in the labour market. Unless over the 1980's the l.d.r.'s are able to achieve growth rates in total regional product substantially higher than those in other areas, divergence in regional per capita incomes is inevitable.

### 3. The pattern and characteristics of regional economic development.

i) Concerning industrial development the evidence seems to suggest a growing concentration of industry in the central areas of the Community at least until the mid-late 1960's. For more recent periods there was clear evidence to suggest a growing 'spread' effect, which has however benefitted the l.d.r.'s to a much lesser extent than those regions in the more immediate vicinity of the European industrial axis. The l.d.r.'s relatively poor performance in this respect is presumably in part due to their more distant location from central markets, and in part due to a certain 'inertia' in the industrial location decision-making process itself.

ii) Whatever pressures may have led to the spread of industrial activity, it is certainly the case that such spread which has occurred, has invariably been marked by the development of well-defined qualitative and functional differences in productive structures as between regions. Evidence also suggested that in a number of cases, the location of M.R.E. branch plants in l.d.r.' over the 1970's had (a) directly served to widen such regional differences, (b) been accompanied by substantial acquisition activity and a decline in the number of locally based firms, resulting in (c) the possibility that the effective elimination of local competitors in local markets may have ultimately resulted in less rather than more competition at this level. Certainly there is no shortage of arguments to suggest that the market shares of leading firms will often tend to remain stable even under conditions of fast market growth, with the result that market dominance may spread from central to peripheral areas as the scope for exploitation of peripheral markets unfolds. Indeed, the availab-

-ility of regional incentives may even have served to accentuate this process, and an argument can be made for greater selectivity in the award of incentives to encourage effective competition by promoting new and small-firm development.

iii) Consideration of the growing role of the multinational enterprise and foreign direct investment in regional industrial development led us to examine evidence of the way in which this, in turn has increasingly come to be associated with the functional sub-division of activities at a spatial level. One conclusion drawn was that it is often difficult to provide any economic justification for the rather large amounts of aid typically made available to such enterprises given that these firms could hardly claim to face important bottle-necks to firm development, and that such aids must have contributed several times over to any additional costs associated with l.d.r. locations. An appropriate policy towards such firms might therefore be to limit substantially the amount of aid directly available in the form of investment grants/soft loans, and expand indirect aid made available for specific infra-structure or human-capital bottle-necks, thus making incentive awards to some degree proportional to actual and additional costs involved.

#### 4. The impact of regional policy on employment in the l.d.r.'s.

Reviewing the impact of regional policies in France, Italy and Ireland, we come to the following main conclusions:

i) From econometric testing, it was found that whilst regional policies had been largely 'successful' over the period considered, there was a fundamental difference between the number of jobs aided in development areas, and jobs actually 'created' (that is jobs which would not have occurred in the absence of regional policy). Hence, incentive cost per job created was invariably higher and substantially so, than national figures on 'cost per job' would suggest.

ii) As a result, in many instances, regional policies appear to have proved very costly in relation to the number of jobs actually created, or alternatives that might exist. They have also proved least effective (apart from Ireland) in inducing firm location and indigenous firm development in the less-developed and peripheral regions.

iii) Certain important differences arise in the operation and effectiveness of the various instruments, in particular,

a) there are very strong theoretical reasons for making regional incentives conditional upon increase in capacity (or important changes in the production process) rather than merely for replacement investment. Even where investment grants/loans are concerned, there is no reason why such aids should not also be linked in value to the creation of additional employment.

b) greater spatial selectivity - perhaps on the basis of objective indicators- than at present exists could usefully be made to ensure that l.d.r.'s achieve clear net locational advantage, with,

c) greater selectivity in the application of aids towards;

- high growth sectors and supplier firms linked to such sectors,
- skilled employment and high-level headquarter functions,

conditional upon,

- given level of use of local inputs,
- maintenance of competitive structure or competitive conditions in markets concerned.

d) Greater use should be made of schemes tailored to the needs of individual sectors. General aid schemes tend to overlook the demands of service-sector activities and small-scale local enterprises. Concerning the latter, it may for instance be important to examine how more emphasis could be placed on strengthening advisory and information networks.

e) Concerning the aids themselves, considerable doubt was raised on the desirability of direct employment subsidies. With respect to other aids, desirability would seem to depend very much on the type of firm or activity involved; specifically, soft-loan or guarantee systems may well be more attractive to smaller firms which experience greater difficulty (and higher cost) of access to risk capital. It may also prove easier by this method (eg. compared to grants) to ensure that the amount of subsidy paid actually bears some relation to the extent job targets are in fact met.

f) At the other end of the scale, tax(profit) incentives may be particularly useful as a basis for attracting larger firms to development areas. Although there are a number of drawbacks and qualifications to be made on the use of such incentives, several advantages are apparent; in the first place larger companies generally have fewer problems in raising investment finance, which consequently weakens their argument for capital grants or soft loans. On the other hand they are more able to take advantage of profit-concessions which may only accrue at some time in the future. Secondly, such concessions may fairly easily be worked into an overall incentive/disincentive policy, possibly at the Community level, whereby the same companies which pay congestion 'taxes' in central areas are offered suitable advantages if they locate in a development area. At the limit such a policy might even turn out to be largely self-financing; it would also have the advantage of being non-inflationary - thus avoiding one of the criticisms often raised against congestion taxes.

As such, we would advocate a 'two-tier' approach to regional policy with considerably greater spatial and sectoral discrimination. Regionally differentiated profit-tax concessions might thus form the cornerstone of such

a policy (complemented by congestion taxes in central areas), but policies towards larger and smaller firms would be greatly different from present, such that the former would receive less direct but more indirect aid, and the latter would benefit from a greater range of incentives, not all of which of a directly financial nature.

5. a) A final point in our study concerns the question of European integration and regional development. If at one level progress towards a unified common market can be seen to bring with it a tendency towards concentration of economic activity, at another level monetary union is likely to bring additional problems; in particular, the possibility of destabilising flows of capital and labour from the l.d.r.'s (and less developed member states) when the exchange rate instrument is ruled out. Whilst monetary integration should also bring certain advantages in the form of greater stability in monetary and trading transactions, the overall welfare advantage to be gained will necessarily be determined by the extent to which 'gainers' are willing to compensate 'losers' in this process.
- b) Reorganisation of the Community budget will clearly be of major importance in this respect, involving some degree of net transfer from stronger to weaker members. Such transfers, if concentrated on productive investment and selective redistributive measures might imply far lower levels of budgetary finance than is popularly recognised.
- c) In this context there is also a growing need for a review of Community funds which in their present form cannot hope to achieve any significant impact on regional disparities. In particular, if the major slice of Community expenditure which is at present used to support agricultural prices can be reduced, there would be much greater scope to expand the structural funds and achieve a greater overall degree of redistribution - an event which, it should be emphasised, is not only necessary for further moves towards E.M.U., but which may also prove essential merely to maintain present levels of integration under the difficult economic conditions of the 1980's. In other words it may no longer be possible to stand still. Without budgetary reform it ceases to be clear what the Community itself can be said to represent. Moreover, with the entry of Greece Spain and Portugal into the E.C., it is evident that there are certain important gaps in Community policies towards the less developed regions which must urgently be filled.

\*\*\*\*\*











